S. HRG. 107–524, Part II

AIR QUALITY IN NEW YORK CITY AFTER THE SEPTEMBER 11, 2001 ATTACKS

FIELD HEARING

BEFORE THE

SUBCOMMITTEE ON CLEAN AIR, WETLANDS, AND CLIMATE CHANGE

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

ON

AIR QUALITY IN NEW YORK CITY AFTER THE SEPTEMBER 11, 2001 ATTACKS

FEBRUARY 11, 2002—NEW YORK CITY

Printed for the use of the Committee on Environment and Public Works

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U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, December 21, 2001

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed air monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Results as of 5:00 p.m. on 12/21

Air: Fixed Monitors in New York:
Asbestos - EPA analyzed 87 samples taken in and around ground zero from December 17 through December 19. In addition, EPA sampled for asbestos at three lower Manhattan locations on December 16 and 17th. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 3,755, with 29 samples above the standard (27 of these were collected prior to September 30, one was collected on October 9 and the other on November 27).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Public School 154 (33 East 135th St., Bronx), Intermediate School 143 (511 W. 182nd St., Manhattan), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on December 16 and 17th. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - Thirty-eight air samples collected on December 18 and 19th were analyzed for asbestos. All were below the school re-entry standard.

Air (Metals) - A total of ten air samples were collected at the landfill on December 3 and 5th . Analysis found all metals at either non-detectable levels or well below applicable standards, guidelines or permissible limits established by EPA and OSHA. Final analysis of these samples showed that chromium was not present.

Ambient Air Samples:
Dioxin - Thirty samples were collected at various lower Manhattan locations on November 19, 21 and 27th and analyzed for dioxin/furans. Three samples, all collected at Location B, showed

results above the level at which EPA would take some type of action to reduce people's exposure based on a 30-year exposure. None of the samples were above the EPA action guideline adjusted to a one-year exposure. These levels do not pose a short-term health affect but should be monitored if they persist for a long period of time.

Silicates - Twenty air samples were collected in lower Manhattan on December 6 and December 11 and analyzed for silicates. None of the samples detected the presence of silicates.

Metals - A total of ten air samples were collected in lower Manhattan on December 6. Analysis found all metals at either non-detectable levels or below applicable standards, guidelines or permissible limits established by EPA and OSHA. Final analysis of these samples showed that chromium was not present.

PCBs - Fifty air samples were collected in lower Manhattan on November 15, 19, 21, 27th and December 4 and analyzed for PCBs. PCBs were not detected in any of the samples.

PAHs - A total of 30 samples were collected on November 27 and December 4 and 6th and analyzed for PAHs. PAHs were not detected in any of these samples.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, December 21, 2001

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Dec 17, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Dec 18, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Dec 18, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Dec 19, 0001 - 1200)

All 19 samples analyzed were below the TEM AHERA standard.
3 samples (Locations N, H, and S-duplicate) were not collected due to equipment malfunctions.

Landfill Ambient Air Sampling Locations

Fresh Kills (Dec 18, 0810 - 2208) - Asbestos

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-2) was not collected due to equipment malfunction.

Fresh Kills (Dec 19, 0823 - 2228) - Asbestos

All 19 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume recorded.

Fresh Kills Landfill (Dec 3) - Metals

5 samples collected (Locations O-17, O-18, O-19, P-5, and P-8).
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills Landfill (Dec 5) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: QA/QC review of chromium in air analytical data has revealed that chromium is not present in these samples.

Ambient Air Sampling Locations

NYC / ER (Nov 19) - Dioxin

1 of the 10 samples (Location B) collected was above the EPA Removal Action guidelines (based on a 30-year exposure).
No samples were identified above the EPA Removal Action level guidelines adjusted to a 1-year exposure duration.
Levels do not pose a short-term health concern. However, elevated sufficiently to be of concern for long-term (chronic exposure).

NYC / ER (Nov 21) - Dioxin

1 of the 10 samples (Location B) collected was above the EPA Removal Action guidelines (based on a 30-year exposure).
No samples were identified above the EPA Removal Action level guidelines adjusted to a 1-year exposure duration.
Levels do not pose a short-term health concern. However, elevated sufficiently to be of concern for long-term (chronic exposure).

NYC / ER (Nov 27) - Dioxin

1 of the 10 samples (Location B) collected was above the EPA Removal Action guidelines (based on a 30-year exposure).
No samples were identified above the EPA Removal Action level guidelines adjusted to a 1-year exposure duration.
Levels do not pose a short-term health concern. However, elevated sufficiently to be of concern for long-term (chronic exposure).

NYC / ER (Dec 6) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: QA/QC review of chromium in air analytical data has revealed that chromium is not present in these samples.

NYC / ER (Nov 27) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Dec 4) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Dec 6) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Nov 15) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Nov 19) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Nov 21) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Nov 27) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Dec 4) - PCBs

Trace amounts detected in 1 of 10 samples well below levels of concern.
9 samples analyzed did not detect any PCBs.
All levels were below the EPA Removal Action level guidelines.

NYC / ER (Dec 6) - Silicates

All 9 samples analyzed did not detect any silicates.
1 sample (Location 3B) was not collected due to a damaged filter.

NYC / ER (Dec 11) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Dec 16) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Coast Guard Building: Battery Park (Site 3)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 8 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Dec 17) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Coast Guard Building: Battery Park (Site 3)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 6 samples were collected from these monitoring sites.

All of the samples were below the TEM AHERA standard.
2 samples (Sites 7 and 9) were not collected due to equipment malfunctions.

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/15/01

Sample No.	WG-6301-1P		11281		11282		11283		11284		11285		11286	
Sampling Location	Method Blank		R		R		A		B		Loc 3B		C	
Sample Volume (L)	0		7515		7515		7350		7365		7350		7365	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of MoCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of DiCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of TrCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of TeCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of PeCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of HxCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of HpCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of OcCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Sum of NoCBs	U	10.0	U	1.33	U	1.33	U	1.36	U	1.36	U	1.36	U	1.36
Total	0		0		0		0		0		0		0	

COC# 04138

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 12/14/01

11-15-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/15/01

Sample No.	11287		11288		11289		11290		11265		11266	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7305		7275		7290		7245		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of MoCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of DiCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of TrCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of TeCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of PeCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of HxCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of HpCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of OcCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Sum of NoCBs	U	1.37	U	1.37	U	1.37	U	1.38	U	10.0	U	10.0
Total	0		0		0				0		0	

COC 04138

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 11/19/01

Sample No.	WG6312-1			11541			11542			11543			11544			11545			11546		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			B-Church & Dey St.			Loc 3B Church & Vesey			C-Liberty St. & Church St.		
Volume (Liters)	0			7260			7502			7125			7275			7260			7290		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0028	U		0.0027	U	0.0005	0.0028	0.0008 J		0.0027	U		0.0028	0.0002 J		0.0027
12378-PeCDD	U	0.0022	0.10	U		0.014	U		0.013	U	0.0015	0.014	0.0026 J		0.014	0.0011 J		0.014	0.0007 J		0.014
123478-HxCDD	U		0.10	U		0.014	U		0.013	0.0019 J		0.014	0.0022 J		0.014	0.0009 J		0.014	0.0009 J		0.014
123678-HxCDD	0.0059 J		0.10	U		0.014	U		0.013	0.0034 J		0.014	0.0055 J		0.014	U		0.014	U		0.014
123789-HxCDD	U		0.10	U		0.014	U		0.013	0.0020 J		0.014	0.0032 J		0.014	0.0014 J		0.014	0.0011 J		0.014
1234678-HpCDD	0.0061 J		0.10	U		0.014	U	0.0008	0.013	0.0132 J		0.014	0.0232		0.014	0.0084 J		0.014	U		0.014
OCDD	0.0330 J		0.20	U		0.028	U		0.027	0.0197 J		0.028	0.0355		0.027	U		0.028	U		0.027
2378-TCDF	U		0.020	U		0.0028	U		0.0027	0.0015 J		0.0028	U	0.0026	0.0027	0.0009 J		0.0028	U	0.0007	0.0027
12378-PeCDF	U	0.0030	0.10	0.0002 J		0.014	U		0.013	0.0018 J		0.014	U	0.0034	0.014	U	0.0013	0.014	U	0.0009	0.014
23478-PeCDF	U	0.0022	0.10	U	0.0001	0.014	U	0.0001	0.013	0.0027 J		0.014	0.0051 J		0.014	0.0015 J		0.014	0.0011 J		0.014
123478-HxCDF	U	0.0014	0.10	U	0.0001	0.014	U		0.013	0.0024 J		0.014	0.0064 J		0.014	0.0020 J		0.014	0.0017 J		0.014
123678-HxCDF	0.0021 J		0.10	U	0.0001	0.014	0.0002 J		0.013	U	0.0020	0.014	U	0.0038	0.014	U	0.0014	0.014	U	0.0011	0.014
234678-HxCDF	0.0019 J		0.10	U		0.014	U	0.0001	0.013	0.0023 J		0.014	0.0048 J		0.014	0.0014 J		0.014	U	0.0010	0.014
123789-HxCDF	U	0.0026	0.10	0.0002 J		0.014	U		0.013	U	0.0007	0.014	0.0015 J		0.014	U		0.014	0.0004 J		0.014
1234678-HpCDF	0.0026 J		0.10	U		0.014	U		0.013	0.0070 J		0.014	0.0177		0.014	0.0058 J		0.014	0.0046 J		0.014
1234789-HpCDF	0.0010 J		0.10	0.0002 J		0.014	U		0.013	0.0008 J		0.014	0.0020 J		0.014	U	0.0007	0.014	U	0.0006	0.014
OCDF	U	0.0053	0.20	U	0.0005	0.028	U		0.027	0.0040 J		0.028	0.0149 J		0.027	0.0047 J		0.028	0.0046 J		0.027
Total TCDDs	U			0.0004			0.0011			0.158			0.197			0.0670			0.0474		
Total PeCDDs	U			0.0006			U			0.116			0.150			0.0626			0.0282		
Total HxCDDs	0.0059			0.0009			0.0009			0.127			0.144			0.0754			0.0437		
Total HpCDDs	0.0078			0.0013			U			0.0292			0.0508			0.0182			0.0129		
Total TCDFs	U			U			U			0.0743			0.0754			0.0307			0.0167		
Total PeCDFs	U			U			U			0.0316			0.0362			0.0107			0.0082		
Total HxCDFs	0.0040			U			0.0002			0.0152			0.0321			0.0071			0.0085		
Total HpCDFs	0.0026			0.0003			0.0002			0.0090			0.0256			0.0077			0.0054		
Total Adjusted Conc																					
TEQ (ND=0)	0.0011			0.0000			0.0001			0.0030			0.0075			0.0021			0.0016		
TEQ (ND=1/2)	0.0026			0.0002			0.0003			0.0034			0.0083			0.0027			0.0018		

COC# 04873
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 12/17/01

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

11-19-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 11/15/01

Sample No.	11547			11548			11549			11550			11303			11304			11305		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank			Lot Blank		
Volume (Liters)	7305			7335			7155			7350			0			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0027	U		0.0028	U	0.0002	0.0027	U		0.020	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.014	U		0.014	U	0.0003	0.014	U		0.10	0.007J		0.10	U		0.10
123478-HxCDD	U	0.0001	0.014	U	0.0004	0.014	U		0.014	U	0.0004	0.014	U		0.10	U		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.014	U	0.0003	0.014	U	0.0012	0.014	0.0047 J		0.10	U	0.0050	0.10	U	0.0019	0.10
123789-HxCDD	U		0.014	U		0.014	U		0.014	0.0005 J		0.014	U		0.10	U		0.10	U	0.0004	0.10
1234678-HpCDD	U		0.014	U		0.014	U		0.014	U		0.014	0.0044 J		0.10	U	0.0050	0.10	0.0040 J		0.10
OCDD	U		0.027	U		0.027	U		0.028	U		0.027	U		0.20	0.0255 J		0.20	0.0225 J		0.20
2378-TCDF	U		0.0027	U		0.0027	U		0.0028	0.0003 J		0.0027	U		0.020	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.014	U	0.0001	0.014	U	0.0004	0.014	U		0.10	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.014	U		0.014	U	0.0005	0.014	U	0.0006	0.10	U		0.10	U		0.10
123478-HxCDF	U		0.014	U		0.014	U	0.0001	0.014	0.0006 J		0.014	U		0.10	0.0003 J		0.10	U		0.10
123678-HxCDF	U		0.014	U		0.014	U	0.0001	0.014	0.0004 J		0.014	U		0.10	U	0.0006	0.10	U		0.10
234678-HxCDF	U		0.014	U		0.014	U	0.0001	0.014	0.0005 J		0.014	U		0.10	0.0004 J		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.014	U		0.014	U		0.014	U		0.10	U	0.0005	0.10	U		0.10
1234678-HpCDF	U		0.014	U		0.014	U		0.014	U		0.014	U		0.10	0.0012 J		0.10	0.0010 J		0.10
1234789-HpCDF	U		0.014	U		0.014	U		0.014	U	0.0001	0.014	U		0.10	U		0.10	U		0.10
OCDF	U	0.0004	0.027	0.0005 J		0.027	U		0.028	0.0008 J		0.027	U	0.0026	0.20	U	0.0024	0.20	0.0019 J		0.20
Total TCDDs	0.0023			0.0005			0.0012			0.0260			U			U			U		
Total PeCDDs	U			U			0.0007			0.0174			U			0.0007			U		
Total HxCDDs	0.0002			U			U			0.0240			0.0047			U			U		
Total HpCDDs	U			U			0.0004			0.0037			0.0069			0.0022			0.0040		
Total TCDFs	0.0001			U			U			0.0107			U			U			U		
Total PeCDFs	U			U			U			0.0046			U			U			U		
Total HxCDFs	U			U			0.0002			0.0039			U			0.0007			U		
Total HpCDFs	U			U			U			0.0003			U			0.0012			U		
Total Adjusted Conc.																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0003			0.0005			0.0005			0.0001		
TEQ (ND=1/2)	0.0002			0.0002			0.0001			0.0005			0.0014			0.0009			0.0011		

COC# 04873

11-19-01dioair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/19/01

Sample No.	WG-6312-1P		11541		11542		11543		11544		11545		11546	
Sampling Location	Method Blank		R		R		A		B		Loc 3B		C	
Sample Volume (L)	0		7260		7502		7125		7275		7260		7290	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of MoCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of DiCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of TrCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of TeCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of PeCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of HxCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of HpCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of OcCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Sum of NoCBs	U	10.0	U	1.38	U	1.33	U	1.40	U	1.37	U	1.38	U	1.37
Total	0		0		0		0		0		0		0	

COC# 04873

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 12/17/01

11-19-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/19/01

Sample No.	11547		11548		11549		11550		11303		11304	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7305		7335		7155		7350		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of MoCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of DiCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of TrCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of TeCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of PeCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of HxCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of HpCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of OcCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Sum of NoCBs	U	1.37	U	1.36	U	1.40	U	1.36	U	10.0	U	10.0
Total	0		0		0				0		0	

COC# 04873

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 11/21/01

Sample No.	WG6320			11311			11312			11313			11314			11315			11316		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			7200			6960			7200			7200			7200			7200		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0028	U		0.0029	0.0004 J		0.0028	0.0005 J		0.0028	0.0015 J		0.0028	U	0.0008	0.0028
12378-PeCDD	0.0031 J		0.10	0.0002 J		0.014	U	0.0003	0.014	0.0012 J		0.014	0.0013 J		0.014	0.0034 J		0.014	0.0017 J		0.014
123478-HxCDD	U		0.10	U		0.014	U		0.014	U	0.0012	0.014	0.0013 J		0.014	0.0030 J		0.014	0.0013 J		0.014
123678-HxCDD	U	0.0056	0.10	U		0.014	U	0.0007	0.014	U		0.014	U		0.014	0.0060 J		0.014	U		0.014
123789-HxCDD	U	0.0047	0.10	U		0.014	U	0.0004	0.014	0.0018 J		0.014	0.0020 J		0.014	0.0042 J		0.014	0.0019 J		0.014
1234678-HpCDD	0.0093 J		0.10	U	0.0011	0.014	U		0.014	0.0103 J		0.014	0.0105 J		0.014	0.0223		0.014	0.0111 J		0.014
OCDD	0.0322 J		0.20	U		0.028	U		0.029	U		0.028	U		0.028	0.0316		0.028	U		0.028
2378-TCDF	U		0.020	U		0.0028	U		0.0029	U	0.0008	0.0028	U	0.0015	0.0028	U	0.0042	0.0028	0.0017 J		0.0028
12378-PeCDF	U	0.0032	0.10	U		0.014	U	0.0002	0.014	0.0012 J		0.014	0.0019 J		0.014	0.0054 J		0.014	0.0024 J		0.014
23478-PeCDF	0.0029 J		0.10	U	0.0002	0.014	U		0.014	0.0018 J		0.014	0.0022 J		0.014	0.0051 J		0.014	0.0017 J		0.014
123478-HxCDF	U	0.0038	0.10	U		0.014	0.0002 J		0.014	0.0022 J		0.014	U	0.0031	0.014	U	0.0079	0.014	0.0033 J		0.014
123678-HxCDF	U	0.0034	0.10	0.0002 J		0.014	U		0.014	U	0.0017	0.014	U	0.002	0.014	U	0.0047	0.014	0.0021 J		0.014
234678-HxCDF	U	0.0031	0.10	U		0.014	U	0.0002	0.014	0.0019 J		0.014	0.0021 J		0.014	0.0044 J		0.014	0.0016 J		0.014
123789-HxCDF	U	0.0036	0.10	U		0.014	U	0.0002	0.014	U	0.0005	0.014	U	0.0008	0.014	0.0015 J		0.014	0.0005 J		0.014
1234678-HpCDF	0.0039 J		0.10	U		0.014	U		0.014	0.0056 J		0.014	0.0064 J		0.014	0.0155		0.014	0.0060 J		0.014
1234789-HpCDF	0.0026 J		0.10	0.0003 J		0.014	U		0.014	U		0.014	0.0006 J		0.014	0.0015 J		0.014	0.0007 J		0.014
OCDF	0.0086 J		0.20	U	0.0011	0.028	U		0.029	0.0029 J		0.028	0.0035 J		0.028	0.064 J		0.028	0.0028 J		0.028
Total TCDDs	U			U			U			0.142			0.132			0.283			0.1220		
Total PeCDDs	0.0031			0.0002			0.0003			0.0981			0.088			0.164			0.0183		
Total HxCDDs	U			U			U			0.102			0.0974			0.210			0.0752		
Total HpCDDs	0.0093			0.0007			0.0019			0.0238			0.0234			0.0495			0.0236		
Total TCDFs	U			U			U			0.0468			0.0346			0.0936			0.0371		
Total PeCDFs	0.0029			0.0002			U			0.230			0.0205			0.0625			0.0201		
Total HxCDFs	U			0.0002			0.0002			0.0156			0.0136			0.0392			0.0207		
Total HpCDFs	0.0039			0.0009			0.0008			0.0065			0.0093			0.0224			0.0076		
Total Adjusted Conc																					
TEQ (ND=0)	0.0032			0.0000			0.0000			0.0027			0.0031			0.0083			0.0032		
TEQ (ND=1/2)	0.0048			0.0003			0.0003			0.0033			0.0041			0.0100			0.0036		

COC# 04875
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 12/19/01

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

11-21-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 11/21/01

Sample No.	11317			11318			11319			11320			11323			11321			11322		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank 6078[1]			Lot Blank 13195[2]		
Volume (Liters)	7200			7200			6960			6975			0			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0028	U		0.0028	U		0.0029	U		0.0029	U		0.020	U		0.020	U		0.020
12378-PeCDD	U		0.014	0.0002 J		0.014	U		0.014	U		0.014	U	0.0008	0.10	U		0.10	U		0.10
123478-HxCDD	U		0.014	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.014	U		0.014	U		0.014	0.0058 J		0.10	0.0029J		0.10	U		0.10
123789-HxCDD	U		0.014	U		0.014	U		0.014	U		0.014	U	0.0017	0.10	U		0.10	U		0.10
1234678-HpCDD	U		0.014	U		0.014	U		0.014	U		0.014	0.0050 J		0.10	0.0073J		0.10	U	0.0058	0.10
OCDD	U		0.028	U		0.028	U		0.029	U		0.029	U		0.20	0.0294J		0.20	0.0284 J		0.20
2378-TCDF	U		0.0028	U		0.0028	U		0.0029	U		0.0029	U		0.020	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.014	U		0.014	U		0.014	0.0014 J		0.10	U		0.10	U		0.10
23478-PeCDF	U		0.014	U	0.0001	0.014	U		0.014	U		0.014	U		0.10	U		0.10	U		0.10
123478-HxCDF	0.0001 J		0.014	U	0.0001	0.014	0.0001 J		0.014	0.0002 J		0.014	U	0.0011	0.10	U		0.10	U		0.10
123678-HxCDF	U		0.014	U		0.014	U	0.0001	0.014	U		0.014	U		0.10	U		0.10	0.0009 J		0.10
234678-HxCDF	U		0.014	U	0.0001	0.014	0.0001 J		0.014	U		0.014	U		0.10	U		0.10	U		0.10
123789-HxCDF	U		0.014	0.0001 J		0.014	U	0.0001	0.014	U		0.014	U		0.10	U		0.10	U		0.10
1234678-HpCDF	U		0.014	U		0.014	U		0.014	U		0.014	0.0022 J		0.10	U	0.0017	0.10	U	0.0021	0.10
1234789-HpCDF	U		0.014	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10	U		0.10
OCDF	0.0007 J		0.028	0.0005 J		0.028	U	0.0006	0.029	0.0008 J		0.029	U	0.0054	0.20	0.0040J		0.20	U	0.0046	0.20
Total TCDDs	0.0010			U			U			U			U			U			U		
Total PeCDDs	U			0.0002			U			U			0.0005			U			U		
Total HxCDDs	0.0004			0.0002			U			0.0006			0.0058			0.0029			U		
Total HpCDDs	0.0016			0.0009			0.0014			0.0021			0.0098			0.0105			U		
Total TCDFs	U			U			U			U			0.0004			U			U		
Total PeCDFs	U			0.0002			U			U			0.0014			U			U		
Total HxCDFs	0.0002			0.0002			0.0002			U			0.0014			U			0.0009		
Total HpCDFs	0.0003			0.0003			0.0005			0.0004			0.0022			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0001			0.0000			0.0000			0.0007			0.0004			0.0001		
TEQ (ND=1/2)	0.0002			0.0002			0.0002			0.0003			0.0020			0.0016			0.0015		

COC# 04875

[1] Lot 6078 used for samples 11311,11312, and 11313
[2] Lot 13195 used for samples 11314 through 11320

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NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/21/01

Sample No.	WG-6320-1P		11311		11312		11313		11314		11315		11316	
Sampling Location	Method Blank		R		R		A		3B		B		C	
Sample Volume (L)	0		7200		6960		7200		7200		7200		7200	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of MoCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of DiCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of TrCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of TeCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of PeCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of HxCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of HpCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of OcCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Sum of NoCBs	U	10.0	U	1.39	U	1.44	U	1.39	U	1.39	U	1.39	U	1.39
Total	0		0		0		0		0		0		0	

COC# 04875

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 12/18/01

11-21-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/21/01

Sample No.	11317		11318		11319		11320		11321		11322		11323	
Sampling Location	D		P		S		E		Lot Blank 6078[1]		Lot Blank 13195[2]		Field Blank	
Sample Volume (L)	7200		7200		6960		6860		0.		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of MoCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of DiCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of TrCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of TeCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of PeCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of HxCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of HpCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of OcCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Sum of NoCBs	U	1.39	U	1.39	U	1.44	U	1.43	U	10.0	U	10.0	U	10.0
Total	0		0		0		0		0		0		0	

COC# 04875

[1] Lot 6078 used for samples 11311,11312, and 11313
[2] Lot 13195 used for samples 11314 through 11320

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 11/27/01

Sample No.	WG6323-1			05621			05622			05623			05624			05625			05626		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			6825			7200			6825			7200			7200			7200		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0029	U		0.0028	0.0004 J		0.0029	U	0.0006	0.0028	0.0009 J		0.0028	U	0.0004	0.0028
12378-PeCDD	U		0.10	U		0.015	U		0.014	0.0013 J		0.015	0.0022 J		0.014	0.0032 J		0.014	0.0013 J		0.014
123478-HxCDD	U		0.10	U		0.015	U		0.014	U		0.015	U	0.0017	0.014	0.0028 J		0.014	U		0.014
123678-HxCDD	U		0.10	U		0.015	U		0.014	U		0.015	U	0.0030	0.014	0.0047 J		0.014	0.0018 J		0.014
123789-HxCDD	U		0.10	U		0.015	U		0.014	U		0.015	U	0.0015	0.014	U	0.0039	0.014	0.0015 J		0.014
1234678-HpCDD	0.0103 J		0.10	0.0137 J		0.015	0.0056 J		0.014	0.0094 J		0.015	0.0115 J		0.014	0.0170		0.014	0.0092 J		0.014
OCDD	0.0632 J		0.20	0.0898		0.029	0.0449		0.028	0.0454		0.029	0.0399		0.028	0.0452		0.028	U		0.028
2378-TCDF	U		0.020	U		0.0029	U		0.0028	0.0005 J		0.0029	0.0009 J		0.0028	0.0012 J		0.0028	0.0007 J		0.0028
12378-PeCDF	0.0018 J		0.10	U		0.015	U		0.014	0.0008 J		0.015	0.0011 J		0.014	0.0019 J		0.014	U	0.0011	0.014
23478-PeCDF	0.0015 J		0.10	U		0.015	U		0.014	0.0006 J		0.015	U	0.0011	0.014	0.0014 J		0.014	0.0007 J		0.014
123478-HxCDF	U		0.10	U		0.015	U		0.014	0.0017 J		0.015	0.0025J		0.014	0.0042 J		0.014	0.0019 J		0.014
123678-HxCDF	U		0.10	U		0.015	U		0.014	0.0010 J		0.015	U	0.0016	0.014	0.0025 J		0.014	U	0.0010	0.014
234678-HxCDF	U		0.10	U		0.015	U		0.014	U	0.0016	0.015	0.0015 J		0.014	0.0022 J		0.014	0.0010 J		0.014
123789-HxCDF	U		0.10	U		0.015	U		0.014	U		0.015	U		0.014	U	0.0012	0.014	U		0.014
1234678-HpCDF	U		0.10	0.0024 J		0.015	U		0.014	0.0063 J		0.015	0.0089 J		0.014	0.0162		0.014	0.0058 J		0.014
1234789-HpCDF	U		0.10	U		0.015	U		0.014	U		0.015	U		0.014	U	0.0022	0.014	U		0.014
OCDF	U		0.29	0.0134 J		0.029	0.0065 J		0.028	0.0105 J		0.029	0.0131 J		0.028	0.0176 J		0.028	0.0092 J		0.028
Total TCDDs	U			U			U			0.0301			0.0401			0.0751			0.0373		
Total PeCDDs	U			U			U			0.0185			0.0325			0.0594			0.0261		
Total HxCDDs	U			U			U			0.0173			0.0329			0.0694			0.0314		
Total HpCDDs	0.0103			0.0196			0.0083			0.0164			0.0205			0.0323			0.0168		
Total TCDFs	U			U			U			0.0104			0.0206			0.0698			0.0136		
Total PeCDFs	0.0039			0.0002			U			0.008			0.0109			0.0195			0.0063		
Total HxCDFs	U			0.0010			U			0.0082			0.0095			0.0174			0.0083		
Total HpCDFs	U			0.0100			0.0044			0.0102			0.0123			0.0224			0.0087		
Total Adjusted Conc																					
TEQ (ND=0)	0.0010			0.0003			0.0001			0.0019			0.0019			0.0055			0.0018		
TEQ (ND=1/2)	0.0042			0.0010			0.0008			0.0024			0.0025			0.0056			0.0020		

COC# 04983
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 12/20/01

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

11-27-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 11/27/01

Sample No.	05627			05628			05629			05630			05661			05662		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7200			5700			7200			7230			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	0.0004 J		0.0028	U		0.0035	U		0.0028	U		0.0028	U		0.020	U		0.020
12378-PeCDD	0.0013 J		0.014	U		0.018	U	0.0001	0.014	U	0.0001	0.014	U		0.10	U		0.10
123478-HxCDD	U	0.0013	0.014	U		0.018	U	0.0005	0.014	U		0.014	U		0.10	U		0.10
123678-HxCDD	0.0021 J		0.014	U		0.018	0.0007 J		0.014	U		0.014	U		0.10	U		0.10
123789-HxCDD	U	0.0016	0.014	U		0.018	U	0.0004	0.014	U		0.014	U		0.10	U		0.10
1234678-HpCDD	0.0096 J		0.014	U		0.018	U		0.014	U		0.014	U	0.0066	0.10	0.0067J		0.10
OCDD	U		0.028	U		0.035	U		0.028	U		0.028	U		0.20	0.0418 J		0.20
2378-TCDF	0.0007 J		0.0028	U		0.0035	U		0.0028	U		0.0028	U		0.020	U		0.020
12378-PeCDF	0.0011 J		0.014	U		0.018	U		0.014	U		0.014	U		0.10	U		0.10
23478-PeCDF	0.0007 J		0.014	U		0.018	U		0.014	U	0.0002	0.014	U		0.10	U		0.10
12378-HxCDF	0.0023 J		0.014	U		0.018	U		0.014	U		0.014	U		0.10	U		0.10
123678-HxCDF	0.0013 J		0.014	U		0.018	U		0.014	U		0.014	U		0.10	U		0.10
234678-HxCDF	0.0013 J		0.014	U		0.018	U		0.014	U		0.014	U		0.10	U		0.10
123789-HxCDF	0.0007 J		0.014	U		0.018	U		0.014	U		0.014	U		0.10	U		0.10
1234678-HpCDF	0.0088 J		0.014	U		0.018	U		0.014	U		0.014	U	0.0020	0.10	0.0018 J		0.10
1234789-HpCDF	0.0014 J		0.014	U		0.018	U		0.014	U		0.014	U		0.10	U		0.10
OCDF	0.0094 J		0.028	U	0.0011	0.035	U		0.028	U		0.028	0.0053 J		0.20	U	0.0057	0.20
Total TCDDs	0.0442			0.0010			0.0002			0.0006			U			U		
Total PeCDDs	0.0311			U			0.0001			0.0002			U			U		
Total HxCDDs	0.0396			U			U			U			U			U		
Total HpCDDs	0.0198			0.0017			U			U			U			0.0099		
Total TCDFs	0.0117			U			U			U			U			U		
Total PeCDFs	0.0108			U			U			U			U			U		
Total HxCDFs	0.0102			U			U			U			U			U		
Total HpCDFs	0.0134			U			U			U			0.0018			0.0041		
Total Adjusted Conc																		
TEQ (ND=0)	0.0026			0.0000			0.0001			0.0000			0.0000			0.0001		
TEQ (ND=1/2)	0.0026			0.0003			0.0003			0.0004			0.0016			0.0012		

COC# 04983

11-27-01dioair.xls

Table 1.1 (cont.) Results of the Analysis for PAH in A\::
WA # 0-0236: NYC ER Site

Sampling Date: 11/27/01

Sample No.	05645		05646		05647		05648		05649	
Sampling Location	B Church & Dey		C Liberty & Church		D Greenwich & Albany		P Albany & South End		S Rector & South End	
Volume (L)	480		480		480		480		385	
Compound Name	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv
Naphthalene	U	4.3	U	4.3	U	4.3	U	4.3	U	5.4
2-Methylnaphthalene	U	4.1	U	4.1	U	4.1	U	4.1	U	5.1
1-Methylnaphthalene	U	4.0	U	4.0	U	4.0	U	4.0	U	4.9
Biphenyl	U	3.8	U	3.8	U	3.8	U	3.8	U	4.7
2,6-Dimethylnaphthalene	U	3.8	U	3.8	U	3.8	U	3.8	U	4.7
Acenaphthylene	U	3.9	U	3.9	U	3.9	U	3.9	U	4.9
Acenaphthene	U	3.6	U	3.6	U	3.6	U	3.6	U	4.5
Dibenzofuran	U	3.4	U	3.4	U	3.4	U	3.4	U	4.3
Fluorene	U	3.5	U	3.5	U	3.5	U	3.5	U	4.3
Phenanthrene	U	3.1	U	3.1	U	3.1	U	3.1	U	3.9
Anthracene	U	3.2	U	3.2	U	3.2	U	3.2	U	3.9
Carbazole	U	3.7	U	3.7	U	3.7	U	3.7	U	4.6
Fluoranthene	U	2.9	U	2.9	U	2.9	U	2.9	U	3.6
Pyrene	U	2.8	U	2.8	U	2.8	U	2.8	U	3.5
Benzo(a)anthracene	U	2.5	U	2.5	U	2.5	U	2.5	U	3.1
Chrysene	U	2.2	U	2.2	U	2.2	U	2.2	U	2.8
Benzo(b)fluoranthene	U	2.3	U	2.3	U	2.3	U	2.3	U	2.9
Benzo(k)fluoranthene	U	2.5	U	2.5	U	2.5	U	2.5	U	3.1
Benzo(e)pyrene	U	2.3	U	2.3	U	2.3	U	2.3	U	2.9
Benzo(a)pyrene	U	2.5	U	2.5	U	2.5	U	2.5	U	3.2
Indeno(1,2,3-cd)pyrene	U	2.6	U	2.6	U	2.6	U	2.6	U	3.3
Dibenzo(a,h)anthracene	U	2.6	U	2.6	U	2.6	U	2.6	U	3.3
Benzo(g,h,i)perylene	U	2.4	U	2.4	U	2.4	U	2.4	U	3.0

COC 04881
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

11-27-01PAH.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/27/01

Sample No.	WG-6323-1P		05621		05622		05623		05624		05625		05626	
Sampling Location	Method Blank		R		R		A		B		Loc 3B		C	
Sample Volume (L)	0		6825		7200		6825		7200		7200		7200	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of MoCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of DiCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of TrCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of TeCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of PeCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of HxCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of HpCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of OcCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Sum of NoCBs	U	10.0	U	1.47	U	1.39	U	1.47	U	1.39	U	1.39	U	1.39
Total	0		0		0		0		0		0		0	

COC# 04863

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 12/17/01

11-27-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/27/01

Sample No.	05627		05628		05629		05630		05661		05662	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7200		5700		7200		7230		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of MoCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of DiCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of TrCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of TeCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of PeCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of HxCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of HpCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of OcCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Sum of NoCBs	U	1.39	U	1.75	U	1.39	U	1.38	U	10.0	U	10.0
Total	0		0		0				0		0	

COC# 04883

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/04/01

Sample No.	WG-6338-1P		05671		05672		05673		05674		05675		05676	
Sampling Location	Method Blank		R		R		A		B		Loc 3B		C	
Sample Volume (L)	0		6780		7245		6960		7200		6815		7230	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Sum of MoCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	1.68	1.47	U	1.38
Sum of DiCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Sum of TrCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Sum of TeCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Sum of PeCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Sum of HxCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Sum of HpCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Sum of OcCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Sum of NoCBs	U	10.0	U	1.47	U	1.38	U	1.44	U	1.39	U	1.47	U	1.38
Total	0		0		0		0		0		1.68		0	

COC# 04885

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 12/17/01

12-04-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/04/01

Sample No.	05677		05678		05679		05680		05711		05712	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7245		5700		7200		6860		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of MoCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of DiCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of TrCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of TeCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of PeCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of HxCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of HpCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of OcCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Sum of NoCBs	U	1.38	U	1.38	U	1.28	U	1.46	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 04885

12-04-01PCBair.xls

Table 1.1 Results of the Analysis for PAH in Air
WA # 0-0236: NYC ER Site

Sampling Date 12/4/01										
Sample No.	05716		05691		05692		05693		05694	
Sampling Location	Lot Blank		TAGA		TAGA		A Barclay & West Broadway		3B Church & Vesey	
Volume (L)	0		480		480		480		480	
Compound Name	Conc. µg	MDL µg	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv
Naphthalene	U	11	U	4.3	U	4.3	U	4.3	U	4.3
2-Methylnaphthalene	U	11	U	4.1	U	4.1	U	4.1	U	4.1
1-Methylnaphthalene	U	11	U	4.0	U	4.0	U	4.0	U	4.0
Biphenyl	U	11	U	3.8	U	3.8	U	3.8	U	3.8
2,6-Dimethylnaphthalene	U	12	U	3.8	U	3.8	U	3.8	U	3.8
Acenaphthylene	U	12	U	3.9	U	3.9	U	3.9	U	3.9
Acenaphthene	U	11	U	3.6	U	3.6	U	3.6	U	3.6
Dibenzofuran	U	11	U	3.4	U	3.4	U	3.4	U	3.4
Fluorene	U	11	U	3.5	U	3.5	U	3.5	U	3.5
Phenanthrene	U	11	U	3.1	U	3.1	U	3.1	U	3.1
Anthracene	U	11	U	3.2	U	3.2	U	3.2	U	3.2
Carbazole	U	12	U	3.7	U	3.7	U	3.7	U	3.7
Fluoranthene	U	12	U	2.9	U	2.9	U	2.9	U	2.9
Pyrene	U	11	U	2.8	U	2.8	U	2.8	U	2.8
Benzo(a)anthracene	U	11	U	2.5	U	2.5	U	2.5	U	2.5
Chrysene	U	10	U	2.2	U	2.2	U	2.2	U	2.2
Benzo(b)fluoranthene	U	11	U	2.3	U	2.3	U	2.3	U	2.3
Benzo(k)fluoranthene	U	12	U	2.5	U	2.5	U	2.5	U	2.5
Benzo(e)pyrene	U	11	U	2.3	U	2.3	U	2.3	U	2.3
Benzo(a)pyrene	U	13	U	2.5	U	2.5	U	2.5	U	2.5
Indeno(1,2,3-cd)pyrene	U	14	U	2.6	U	2.6	U	2.6	U	2.6
Dibenzo(a,h)anthracene	U	14	U	2.6	U	2.6	U	2.6	U	2.6
Benzo(g,h,i)perylene	U	13	U	2.4	U	2.4	U	2.4	U	2.4

COC 04888
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0013		WTC-0014		WTC-0008	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		O-19	
Air Volume (L)		-		-		-		0		0		5530	
Date Collected		-		-		-		12/05/01		12/05/01		12/05/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.45	0.23
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.009
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.009
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.057	0.023
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.009
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.023
Calcium	ICAP	3.8	2.5	3.9	2.5	4.0	2.5	U	2.5	U	2.5	1.8	0.45
Chromium	ICAP	0.87	0.13	0.80	0.13	0.77	0.13	U	0.13	U	0.13	U	0.023
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.045
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.045
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	1.5	0.11
Lead	AA-Fur	U	0.05	U	0.05	0.19	0.05	U	0.05	U	0.05	0.018	0.009
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.3
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.033	0.023
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.045
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	9.0
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.009
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.023
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.3
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.009
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.045
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.17	0.045

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1 1 (cont) Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		WTC-0009		WTC-0010		WTC-0011		WTC-0012	
Location		O-18		O-17		P-8		P-5	
Air Volume (L)		5520		4810		7330		7370	
Date Collected		12/05/01		12/05/01		12/05/01		12/05/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.1	0.23	0.72	0.26	0.50	0.17	0.58	0.17
Antimony	AA-Fur	0.018	0.0091	0.011	0.01	0.0069	0.0068	U	0.0068
Arsenic	AA-Fur	U	0.0091	U	0.01	U	0.0068	U	0.0068
Barium	ICAP	0.15	0.023	0.091	0.026	0.044	0.017	0.046	0.017
Beryllium	ICAP	U	0.0091	U	0.01	U	0.0068	U	0.0068
Cadmium	ICAP	U	0.023	U	0.026	U	0.017	U	0.017
Calcium	ICAP	5.4	0.45	2.7	0.52	1.7	0.34	3.5	0.34
Chromium	ICAP	U	0.023	U	0.026	0.018	0.017	0.023	0.017
Cobalt	ICAP	U	0.045	U	0.052	U	0.034	U	0.034
Copper	ICAP	0.10	0.045	0.064	0.052	0.059	0.034	0.053	0.034
Iron	ICAP	3.6	0.11	2.1	0.13	1.7	0.085	1.5	0.085
Lead	AA-Fur	0.13	0.0091	0.12	0.01	0.067	0.0068	0.035	0.0068
Magnesium	ICAP	U	2.3	U	2.6	U	1.7	U	1.7
Manganese	ICAP	0.058	0.023	0.036	0.026	0.036	0.017	0.037	0.017
Nickel	ICAP	U	0.045	U	0.052	U	0.034	U	0.034
Potassium	ICAP	U	9.1	U	10	U	6.8	U	6.8
Selenium	AA-Fur	U	0.0091	U	0.01	U	0.0068	U	0.0068
Silver	ICAP	U	0.023	U	0.026	U	0.017	U	0.017
Sodium	ICAP	U	2.3	U	2.6	U	1.7	U	1.7
Thallium	AA-Fur	U	0.0091	U	0.01	U	0.0068	U	0.0068
Vanadium	ICAP	U	0.045	U	0.052	U	0.034	U	0.034
Zinc	ICAP	0.28	0.045	0.28	0.052	0.16	0.034	0.20	0.034

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		11383		11384		11391	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		TAGA	
Air Volume (L)		-		-		-		0		0		4910	
Date Collected		-		-		-		12/06/01		12/06/01		12/06/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.86	0.25
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.046	0.025
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Calcium	ICAP	3.8	2.5	3.9	2.5	4.0	2.5	U	2.5	U	2.5	3.6	0.51
Chromium	ICAP	0.87	0.13	0.80	0.13	0.77	0.13	U	0.13	U	0.13	U	0.025
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.051
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.051
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	2.2	0.13
Lead	AA-Fur	U	0.05	U	0.05	0.19	0.05	U	0.05	U	0.05	0.034	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.5
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.038	0.025
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.051
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	4.2	2.5
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.051
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.24	0.051

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1 1(cont) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		11392		11393		11394		11395		11396		11397	
Location		TAGA		A-BARCLAY ST. & WEST BROADWAY		LOC 3B CHURCH & VESEY ST		B-CHURCH & DEY ST.		C -LIBERTY ST. & CHURCH		D-GREENWICH & ALBANY ST.	
Air Volume (L)		4970		4950		4970		4970		4610		5010	
Date Collected		12/06/01		12/06/01		12/06/01		12/06/01		12/06/01		12/06/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.99	0.25	1.5	0.25	1.6	0.25	2.4	0.25	1.8	0.27	1.7	0.25
Antimony	AA-Fur	U	0.01	0.023	0.01	0.02	0.01	0.019	0.01	0.012	0.011	0.041	0.01
Arsenic	AA-Fur	U	0.01	0.011	0.01	0.015	0.01	0.012	0.01	U	0.011	0.025	0.01
Barium	ICAP	0.059	0.025	0.064	0.025	0.065	0.025	0.10	0.025	0.093	0.027	0.13	0.025
Beryllium	ICAP	U	0.01	U	0.01	U	0.01	U	0.01	U	0.011	U	0.01
Cadmium	ICAP	U	0.025	U	0.025	U	0.025	U	0.025	U	0.027	U	0.025
Calcium	ICAP	4.6	0.50	13	0.51	14	0.50	20	0.50	14	0.54	13	0.50
Chromium	ICAP	0.035	0.025	U	0.025	0.025	0.025	U	0.025	U	0.027	0.061	0.025
Cobalt	ICAP	U	0.05	U	0.051	U	0.05	U	0.05	U	0.054	U	0.05
Copper	ICAP	0.054	0.05	0.15	0.051	0.18	0.05	0.18	0.05	0.12	0.054	0.49	0.05
Iron	ICAP	3.0	0.13	8.2	0.13	11	0.13	12	0.13	8.2	0.14	13	0.12
Lead	AA-Fur	0.053	0.01	0.14	0.01	0.16	0.01	0.11	0.01	0.071	0.011	0.28	0.01
Magnesium	ICAP	U	2.5	U	2.5	U	2.5	2.7	2.5	U	2.7	U	2.5
Manganese	ICAP	0.048	0.025	0.13	0.025	0.16	0.025	0.20	0.025	0.14	0.027	0.2	0.025
Nickel	ICAP	U	0.05	U	0.051	U	0.05	U	0.05	U	0.054	0.058	0.05
Potassium	ICAP	U	10	U	10	U	10	U	10	U	11	U	10
Selenium	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.01	U	0.011	U	0.01
Silver	ICAP	U	0.025	U	0.025	U	0.025	U	0.025	U	0.027	U	0.025
Sodium	ICAP	4.3	2.5	U	2.5	U	2.5	U	2.5	U	2.7	3.0	2.5
Thallium	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.01	U	0.011	U	0.01
Vanadium	ICAP	U	0.05	U	0.051	U	0.05	U	0.05	U	0.054	U	0.05
Zinc	ICAP	0.31	0.05	0.77	0.051	0.78	0.05	1.1	0.05	0.75	0.054	4.2	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		11398		11399		11400	
Location		P-ALBANY ST. & SOUTH END AVE		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		5030		5040		5030	
Date Collected		12/06/01		12/06/01		12/06/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.3	0.25	1.2	0.25	1.3	0.25
Antimony	AA-Fur	U	0.0099	U	0.0099	U	0.0099
Arsenic	AA-Fur	U	0.0099	U	0.0099	U	0.0099
Barium	ICAP	0.075	0.025	0.067	0.025	0.059	0.025
Beryllium	ICAP	U	0.0099	U	0.0099	U	0.0099
Cadmium	ICAP	U	0.025	U	0.025	U	0.025
Calcium	ICAP	9.0	0.50	5.5	0.50	8.2	0.50
Chromium	ICAP	U	0.025	U	0.025	U	0.025
Cobalt	ICAP	U	0.05	U	0.05	U	0.05
Copper	ICAP	0.089	0.05	0.057	0.05	0.057	0.05
Iron	ICAP	4.2	0.12	3.4	0.12	2.8	0.12
Lead	AA-Fur	0.054	0.0099	0.045	0.0099	0.041	0.0099
Magnesium	ICAP	2.7	2.5	U	2.5	U	2.5
Manganese	ICAP	0.065	0.025	0.054	0.025	0.057	0.025
Nickel	ICAP	U	0.05	U	0.05	U	0.05
Potassium	ICAP	U	9.9	U	9.9	U	9.9
Selenium	AA-Fur	U	0.0099	U	0.0099	U	0.0099
Silver	ICAP	U	0.025	U	0.025	U	0.025
Sodium	ICAP	3.1	2.5	3.3	2.5	4.1	2.5
Thallium	AA-Fur	U	0.0099	U	0.0099	U	0.0099
Vanadium	ICAP	U	0.05	U	0.05	U	0.05
Zinc	ICAP	0.39	0.05	0.30	0.05	0.32	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0006		WTC-0007		WTC-0001	
Location		Lab		Lab		Lab		Lot Blank		Field Blank		O-19	
Air Volume (L)		-		-		-		0		0		4800	
Date Collected		-		-		-		12/03/01		12/03/01		12/03/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.33	0.26
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.048	0.026
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Calcium	ICAP	3.8	2.5	3.8	2.5	3.5	2.5	U	2.5	U	2.5	1.8	0.52
Chromium	ICAP	0.81	0.13	0.92	0.13	0.69	0.13	U	0.13	U	0.13	U	0.026
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.071	0.052
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	1.6	0.13
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.17	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.31	0.052

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		WTC-0002		WTC-0003		WTC-0004		WTC-0005	
Location		O-18		O-17		P-8		P-5	
Air Volume (L)		4730		4650		4790		4700	
Date Collected		12/03/01		12/03/01		12/03/01		12/03/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.32	0.26	0.29	0.27	U	0.26	0.35	0.27
Antimony	AA-Fur	U	0.011	U	0.011	U	0.01	U	0.011
Arsenic	AA-Fur	U	0.011	U	0.011	U	0.01	U	0.011
Barium	ICAP	0.052	0.026	0.038	0.027	0.026	0.026	U	0.027
Beryllium	ICAP	U	0.011	U	0.011	U	0.01	U	0.011
Cadmium	ICAP	U	0.026	U	0.027	U	0.026	U	0.027
Calcium	ICAP	1.9	0.53	1.7	0.54	1.1	0.52	3.4	0.53
Chromium	ICAP	U	0.026	U	0.027	U	0.026	U	0.027
Cobalt	ICAP	U	0.053	U	0.054	U	0.052	U	0.053
Copper	ICAP	0.48	0.053	U	0.054	0.07	0.052	U	0.053
Iron	ICAP	1.3	0.13	1.2	0.13	0.85	0.13	1.0	0.13
Lead	AA-Fur	0.058	0.011	0.047	0.011	0.029	0.01	0.041	0.011
Magnesium	ICAP	U	2.6	U	2.7	U	2.6	U	2.7
Manganese	ICAP	U	0.026	U	0.027	U	0.026	U	0.027
Nickel	ICAP	U	0.053	U	0.054	U	0.052	U	0.053
Potassium	ICAP	U	11	U	11	U	10	U	11
Selenium	AA-Fur	U	0.011	U	0.011	U	0.01	U	0.011
Silver	ICAP	U	0.026	U	0.027	U	0.026	U	0.027
Sodium	ICAP	U	2.6	3.1	2.7	4.9	2.6	U	2.7
Thallium	AA-Fur	U	0.011	U	0.011	U	0.01	U	0.011
Vanadium	ICAP	U	0.053	U	0.054	U	0.052	U	0.053
Zinc	ICAP	0.44	0.053	0.17	0.054	0.19	0.052	0.19	0.053

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/18/01 0810 to 2208

Data Validation Date: 12/20/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/18/01	LF01649	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01650	P-2	NS	Air	NS	NS	NS	NS	NS	NS
12/18/01	LF01651	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01652	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01653	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01654	P-6	719	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01655	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01656	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01657	W-11	720	Air	19.11	0.010	0	0	<8.75	<0.0047
12/18/01	LF01658	W-12A	720	Air	14.01	0.0075	2***	1***	26.25	0.0140
12/18/01	LF01659	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01660	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01661	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01662	T-15	720	Air	58.60	0.031	0	0	<8.75	<0.0047
12/18/01	LF01663	T-16	720	Air	22.93	0.012	0	0	<8.75	<0.0047
12/18/01	LF01664	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01665	O-18	720	Air	8.92	0.005	0	0	<8.75	<0.0047
12/18/01	LF01666	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01667	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/18/01	LF01668	Lot Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)
12/18/01	LF01669	Trip Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-18-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/19/01 0823 to 2228

Data Validation Date: 12/21/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/19/01	LF01670	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01671	P-2	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01672	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01673	P-4	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
12/19/01	LF01674	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01675	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01676	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01677	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01678	W-11	720	Air	17.83	0.0095	1***	0	8.75	0.0047
12/19/01	LF01679	W-12A	720	Air	8.92	0.005	1***	0	8.75	0.0047
12/19/01	LF01680	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01681	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01682	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01683	T-15	212	Air	57.32	0.104	0	0	<8.75	<0.0159
12/19/01	LF01684	T-16	720	Air	12.74	0.007	0	0	<8.75	<0.0047
12/19/01	LF01685	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01686	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01687	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01688	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	LF01689	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/19/01	LF01690	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-19-01-am.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/06/01 0830 to 1608

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
12/6/01	11413	A	1000	Air	<0.01	<0.02	<0.02
12/6/01	11415	B	1000	Air	<0.01	<0.02	<0.02
12/6/01	11416	C	1077.5	Air	<0.01	<0.02	<0.02
12/6/01	11417	D	1000	Air	<0.01	<0.02	<0.02
12/6/01	11420	E	1000	Air	<0.01	<0.02	<0.02
12/6/01	11418	P	1000	Air	<0.01	<0.02	<0.02
12/6/01	11419	S	1000	Air	<0.01	<0.02	<0.02
12/6/01	11411	TAGA	1000	Air	<0.01	<0.02	<0.02
12/6/01	11412	TAGA	1000	Air	<0.01	<0.02	<0.02

coc# 04373

NS: Not sampled

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
Location 3B Church & Vesey

ERT 12/17/01

NIOSH 7500: Silica crystalline by XRD

J denotes that value is in between the level of detection and the level of quantitation

FL-12-06-01silica.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/11/01 0750 to 1500

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
12/11/01	05913	A	1000	Air	<0.01	<0.02	<0.02
12/11/01	05914	3B	1000	Air	<0.01	<0.02	<0.02
12/11/01	05915	B	1000	Air	<0.01	<0.02	<0.02
12/11/01	05916	C	1000	Air	<0.01	<0.02	<0.02
12/11/01	05917	D	1000	Air	<0.01	<0.02	<0.02
12/11/01	05920	E	1000	Air	<0.01	<0.02	<0.02
12/11/01	05918	P	1000	Air	<0.01	<0.02	<0.02
12/11/01	05919	S	1000	Air	<0.01	<0.02	<0.02
12/11/01	05911	TAGA	1000	Air	<0.01	<0.02	<0.02
12/11/01	05912	TAGA	1000	Air	<0.01	<0.02	<0.02

coc# 04143

NS: Not sampled

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
Location 3B Church & Vesey

ERT 12/18/01

NIOSH 7500: Silica crystalline by XRD

J denotes that value is in between the level of detection and the level of quantitation

FL-12-11-01silica.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/17/01 1200 to 2359

Data Validation Date: 12/20/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
12/17/01	RST-02058	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02059	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02060	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02061	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02062	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02063	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02064	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02065	A-Dup	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02066	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02067	B-Dup	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02068	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02069	H	1224*	Air	<7.0	<0.002	0	0	<13.33	<0.0042
12/17/01	RST-02070	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02071	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02072	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02073	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02074	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02075	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02076	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02077	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/17/01	RST-02078	E	1224*	Air	<7.0	<0.002	0	0	<13.33	<0.0042
12/17/01	RST-02079	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	FB121801	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/18/01	TB121801	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method except for samples RST-02069 and RST-02078; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-17-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/18/01 0001 to 1200

Data Validation Date: 12/20/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/18/01	RST-02080	L	555	Air	<7.0	<0.005	0	0	<8.00	<0.0055
12/18/01	RST-02081	M-1	684	Air	<7.0	<0.004	0	0	<8.00	<0.0045
12/18/01	RST-02082	N	1062.5	Air	<7.0	<0.003	0	0	<13.33	<0.0048
12/18/01	RST-02083	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02084	Q	1186.6	Air	<7.0	<0.002	0	0	<13.33	<0.0043
12/18/01	RST-02085	F	717	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02086	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02087	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02088	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02089	C-Dup	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02090	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02091	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02092	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02093	D-Dup	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02094	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02095	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02096	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02097	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02098	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02099	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02100	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02101	W	677	Air	<7.0	<0.004	0	0	<8.00	<0.0045
12/18/01	FB121801	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/18/01	TB121801	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (filters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-18-01-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/18/01 1200 to 2359

Data Validation Date: 12/21/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/18/01	RST-02102	L	720	Air	<7.0	<0.004	0	0	<8.39	<0.0048
12/18/01	RST-02103	N	1193.4	Air	<7.0	<0.002	0	0	<13.33	<0.0043
12/18/01	RST-02104	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02105	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02106	Q	1224*	Air	<7.0	<0.002	0	0	<13.33	<0.0042
12/18/01	RST-02107	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02108	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02109	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02110	C	720	Air	7.64	0.004	0	0	<8.89	<0.0048
12/18/01	RST-02111	H	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/18/01	RST-02112	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02113	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02114	I-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02115	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02116	K	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/18/01	RST-02117	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02118	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02119	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02120	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02121	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02122	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/18/01	RST-02123	W	386	Air	7.64	0.008	3***	1***	32	0.0319
12/19/01	FB121901	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/19/01	TB121901	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method, except for sample RST-02106; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-18-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/19/01 0001 to 1200

Data Validation Date: 12/21/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/19/01	RST-02124	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02125	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	-	N	NS	Air	NS	NS	NS	NS	NS	NS
12/19/01	RST-02126	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02127	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02128	F	715	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02129	A	545	Air	7.64	0.005	0	0	<8.00	<0.0057
12/19/01	RST-02130	B	720	Air	7.01	0.004	1***	1***	17.78	0.0095
12/19/01	RST-02131	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	-	H	NS	Air	NS	NS	NS	NS	NS	NS
12/19/01	RST-02132	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02133	I	699	Air	<7.0	<0.004	1***	0	8.89	0.0049
12/19/01	RST-02134	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02135	T	316	Air	<7.0	<0.009	0	0	<8.00	<0.0097
12/19/01	RST-02136	U	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/19/01	RST-02137	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02138	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	-	S-Duplicate	NS	Air	NS	NS	NS	NS	NS	NS
12/19/01	RST-02139	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02140	P-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/19/01	RST-02141	E	1173	Air	<7.0	<0.002	0	0	<13.33	<0.0044
12/19/01	RST-02142	W	443	Air	8.92	0.008	3***	0	24	0.0209
12/19/01	FB121901	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/19/01	TB121901	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
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Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading.
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-19-01-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/16/01 1200 to 2400

Data Validation Date: 12/20/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
12/16/01	7093-18-0080	Park Row	1176***	Air	<7.0	<0.002	0	0	<13.33	<0.0044
12/16/01	7093-19-0080	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/16/01	7093-20-0080	Coast Guard	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/16/01	7093-15-0079	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/16/01	7094-09-0069	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/16/01	7096-12-0074	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/16/01	7095-98-0076	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/16/01	7097-18-0072	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-16-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/17/01 1200 to 2400

Data Validation Date: 12/21/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
12/17/01	7093-18-0081	Park Row	1220	Air	<7.0	<0.002	0	0	<13.33	<0.0042
12/17/01	7093-19-0081	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/17/01	7093-20-0081	Coast Guard	1180***	Air	<7.0	<0.002	0	0	<13.33	<0.0044
12/17/01	7093-15-0080	Manhattan PS #143	990***	Air	<7.0	<0.003	0	0	<11.43	<0.0044
12/17/01	7094-09-0070	Bronx PS #154	974***	Air	<7.0	<0.003	0	0	<11.43	<0.0045
12/17/01	7096-12-0075	Queens PS #199	NS	Air	NS	NS	NS	NS	NS	NS
12/17/01	7095-98-0077	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS
12/17/01	7097-18-0073	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-17-01pm.xls

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday - Thursday, December 22-27, 2001

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 7:00 a.m. on 12/28

Staten Island Landfill:
Air (Particulates) - EPA used portable monitors to collect samples of particulates on December 19, 22 and 26 at the Staten Island Landfill. No significant readings reported.

Ambient Air Samples - lower Manhattan:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from December 17 through 20 at Pace University, Borough of Manhattan Community College, the Coast Guard building in Battery Park and on Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM10 - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from December 17 through 20 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Particulate Monitoring - EPA used portable monitors to collect samples from December 19 through December 23 and on December 26 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted from December 19 to 23 and on December 26 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day. Benzene exceeded the OSHA standard on Dec. 20 and 22 on the debris pile at the North Tower and on December 23 and 26 at the North Tower debris pile. Fourteen of twenty other samples taken at EPA's Wash Tent (West

St. and Murray), Austin Tobin Plaza and in the debris area at ground level showed no detectable levels of benzene.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds from December 19 through 24. No significant readings were found December 20 through 24. On December 19, nothing of significance was found in the routine monitoring. EPA did additional monitoring on December 19, analyzing air samples from in and around ground zero for hexamethylene diisocyanate (HDI), methylene bis(4-phenyl isocyanate) (MDI) and toluene-2,4-diisocyanate (TDI). Low levels of HDI, MDI and TDI were identified at four locations: North Tower, South Tower, Vista Hotel and Church and Dey. All levels were below the OSHA permissible exposure limits.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, December 27, 2001

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Dec 12, 1200 - 2359)

Errata: Resubmittal corrects volume for sample no. RST-01842.
All results, other than minor adjustments for RST-01842, remain the same.

Landfill Ambient Air Sampling Locations

Fresh Kills (Dec 17-18) - Particulate Monitoring (Dataram)

No particulate measurements taken during this period due to weather conditions.

Fresh Kills (Dec 19) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-1, P-2, P-3, P-8) based on daily average concentrations.

Fresh Kills (Dec 21) - Particulate Monitoring (Dataram)

No particulate measurements taken during this period.

Fresh Kills (Dec 22) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-1, P-2, P-3, P-8) based on daily average concentrations.

Fresh Kills (Dec 23 -25) - Particulate Monitoring (Dataram)

No particulate measurements taken during this three-day period.

Fresh Kills (Dec 26) - Particulate Monitoring (Dataram)

Nothing of significance reported at two stations (P-1, P-2) based on daily average concentrations.
Pumps for P-3 and P-8 malfunctioned.

Ambient Air Sampling Locations

NYC / ER (Dec 17) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.28 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.07 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***10.92 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***11.62 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 17) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***22.03 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 18) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***8.79 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***8.66 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***7.56 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***9.40 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 18) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***16.68 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 19) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***17.10 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***13.31 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***9.65 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***13.39 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 19) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***25.81 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 20) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***14.08 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.88 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***9.55 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***9.46 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 20) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***18.65 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 19) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 to 6½ hours.
Station L values ranged from 0.1 to 305.8 ug/m^3 with an average of 33.6 ug/m^3.
Station N values ranged from 3.9 to 140.6 ug/m^3 with an average of 22.3 ug/m^3.
Station R values ranged from 0.7 to 204.0 ug/m^3 with an average of 25.7 ug/m^3.

NYC / ER (Dec 20) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 to 6½ hours.
Station L values ranged from 0.0 to 153.8 ug/m^3 with an average of 11.4 ug/m^3.
Station N values ranged from 0.7 to 116.3 ug/m^3 with an average of 8.0 ug/m^3.
Station R values ranged from 1.6 to 118.5 ug/m^3 with an average of 10.7 ug/m^3.

NYC / ER (Dec 21) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 1.9 to 117.0 ug/m^3 with an average of 5.7 ug/m^3.
Station N values ranged from 0.8 to 208.9 ug/m^3 with an average of 4.0 ug/m^3.
Station R values ranged from 2.4 to 57.4 ug/m^3 with an average of 5.4 ug/m^3.

NYC / ER (Dec 22) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 5½ to 6 hours.
Station L values ranged from 0.0 to 163.9 ug/m^3 with an average of 4.5 ug/m^3.
Station N values ranged from 0.5 to 27.0 ug/m^3 with an average of 4.6 ug/m^3.
Station R values ranged from 0.0 to 151.4 ug/m^3 with an average of 8.1 ug/m^3.

NYC / ER (Dec 23) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 5 to 6 hours.
Station L values ranged from 0.0 to 88.8 ug/m^3 with an average of 27.4 ug/m^3.
Station N values ranged from 3.4 to 440.8 ug/m^3 with an average of 24.7 ug/m^3.
Station R values ranged from 0.1 to 337.7 ug/m^3 with an average of 25.1 ug/m^3.

NYC / ER (Dec 24) - Particulate Monitoring (Dataram)

No measurements were taken at the three particulate monitoring locations (Stations L, N, R) due to weather conditions.

NYC / ER (Dec 25) - Particulate Monitoring (Dataram)

No monitoring conducted.

NYC / ER (Dec 26) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6½ to 7 hours.
Station L values ranged from 3.2 to 268.5 ug/m^3 with an average of 17.7 ug/m^3.
Station N values ranged from 62.9 to 870.8 ug/m^3 with an average of 75.2 ug/m^3.
Station R values ranged from 4.0 to 1316.2 ug/m^3 with an average of 21.0 ug/m^3.

NYC / ER (Dec 19) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 2 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza), including in the debris area at ground level.

NYC / ER (Dec 20) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (South Tower) in the debris area at ground level.
2 of the 3 other samples (Wash Tent, Austin Tobin Plaza) did not note any benzene above the detection limit (20 ppbv).

NYC / ER (Dec 21) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (ranging from 20 ppbv to 250 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, South Tower), including in the debris area at ground level.

NYC / ER (Dec 22) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (South Tower) in the debris area at ground level.
2 of the 3 other samples (Wash Tent, Austin Tobin Plaza) did not note any benzene above the detection limit (20 ppbv).

NYC / ER (Dec 23) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
2 of the 3 other samples (Wash Tent, Austin Tobin Plaza) did not note any benzene above the detection limit (20 ppbv).

NYC / ER (Dec 24) - Volatile Organics (Mobile Laboratory)

No samples collected during this period due to weather conditions.

NYC / ER (Dec 25) - Volatile Organics (Mobile Laboratory)

No samples collected during this period.

NYC / ER (Dec 26) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
All 3 of the other samples (Wash Tent, Austin Tobin Plaza) did not note any benzene above the detection limit (ranging from 20 ppbv to 50 ppbv).

Direct Reading Instruments

NYC / ER (Dec 19)

Nothing of significance reported with routine daily monitoring parameters.
Monitoring conducted for hexamethylene diisocyanate (HDI), methylene bis(4-phenyl isocyanate) (MDI), and toluene-2,4-diisocyanate (TDI).
Locations monitored for the cyanide compounds included: North Tower, South Tower, Vista Hotel, Building No. 4, and Locations A, B, C, D, E, P, R, S, 3B from the fixed ambient air sampling stations.
Measurements for the cyanide compounds consisted of one to three 3-minute run(s) taken once that day at each of the locations.
Low levels of HDI, MDI, and/or TDI identified at the North Tower, South Tower, Vista Hotel, and Location B (Note: not all compounds were identified at each of the locations).
The MDI and TDI hits were all measured at or below the detection limit (2 ppb).
As a point of comparison, all levels detected were below the respective OSHA PELs and NIOSH RELs for these compounds. The NIOSH REL for HDI and MDI is 0.005 ppm. The OSHA PEL for TDI is 0.02 ppm.
Note: The cassettes used to monitor for these cyanide compounds also respond positively to elevated levels of chlorine, nitrogen dioxide, nitric oxide, and ozone.
Note: Air samples (15-minute grabs) were collected for fixed laboratory analysis at two of the work-zone locations and at each of the fixed ambient air sampling stations. Results are pending.

NYC / ER (Dec 20)

Nothing of significance reported.

NYC / ER (Dec 21)

Nothing of significance reported.

NYC / ER (Dec 22)

Nothing of significance reported.

NYC / ER (Dec 23)

Nothing of significance reported.

NYC / ER (Dec 24)

Nothing of significance reported during the afternoon hours.
No measurements taken during the morning hours due to weather conditions.

NYC / ER (Dec 25)

No monitoring conducted during this period.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/12/01 1200 to 2359

Data Validation Date: 12/16/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
12/12/01	RST-01839	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01840	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01841	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01842	J	555	Air	<7.0	<0.005	1***	0	8.00	0.0055
12/12/01	RST-01843	Q	332	Air	<7.0	<0.008	0	0	<8.00	<0.0093
12/12/01	RST-01844	F	530	Air	<7.0	<0.005	0	0	<8.00	<0.0058
12/12/01	RST-01845	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01846	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01847	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01848	H	1047.2	Air	<7.0	<0.003	0	0	<13.33	<0.0049
12/12/01	RST-01849	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01850	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01851	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01852	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01853	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01854	V	720	Air	<7.0	<0.004	0	1***	8.89	0.0048
12/12/01	RST-01855	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01856	S-Dup	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01857	P	720	Air	<7.0	<0.004	0	1***	8.89	0.0048
12/12/01	RST-01858	P-Dup	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/12/01	RST-01859	E	940.1	Air	<7.0	<0.003	0	0	<11.43	<0.0047
12/12/01	RST-01860	W	720	Air	7.64	0.004	0	0	<8.89	<0.0048
12/13/01	FB121301	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/13/01	TB121301	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-12-01-pmrev1.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 19, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	42	10:30:00	10	00:15:00	100	0.0	13.2	32.7	413.1
2	-74.198262	40.566883	2295	1	42	10:30:00	10	00:15:00	100	0.0	1.4	31.1	495.4
3	-74.198685	40.570054	2011	1	42	10:30:00	10	00:15:00	100	0.0	6.9	24.9	174.5
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	2294	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2083	1	42	10:30:00	10	00:15:00	0	0.0	12	25.8	89.3

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 22, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	64	16:00:00	10	00:15:00	100	0.0	7.1	50.9	814.7
2	-74.198262	40.566883	2295	1	0	00:00:00	10	00:15:00	100	0.0	0.0	22.1	584.7
3	-74.198685	40.570054	2011	1	0	00:00:00	10	00:15:00	100	0.0	0.0	24.1	955.4
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2083	1	17	4:15:00	10	00:15:00	100	0.0	3.3	43.0	923.2

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 26, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	45	11:15:00	10	00:15:00	100	0.0	11.4	41.3	383.4
2	-74.198262	40.566883	2295	1	44	11:00:00	10	00:15:00	100	0.0	2.4	38.9	2674.0
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

(EARLY)

DATE: 12/19/01

RST: Patrick Chan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	8:10	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
N	8:25	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
M1	8:33	ND	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
J	8:40	0.5	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
Q	8:50	1.2	ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
F	8:55	1.5	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
A	9:03	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
B	9:08	0.5	0.3	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
C	9:13	2.7	0.1	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
H	9:25	N.D	0.6	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
I	9:35	*	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
D	9:50		0.2	ND	21.0	4	ND	ND	ND	ND	ND	ND	ND
K	9:55		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
T	10:05		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
U	10:07		0.3	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
V	10:13		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
S	10:18		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
P	10:27		ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
E	10:35		ND	ND	21.0	6	ND	ND	ND	ND	ND	ND	ND

* FID malfunctioning

HCl, HF, $COCl_2$ – SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

(LATE)

DATE: 12/19/01

RST: Patrick Chan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	12:15	*	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
M1	12:20		ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
N	12:25		0.3	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
J	12:28		0.3	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
G	12:31		0.3	ND	21.1	6	ND	ND	ND	ND	ND	ND	ND
F	12:35		ND	1	21.1	1	ND	ND	ND	ND	ND	ND	ND
A	12:41		ND	1	21.2	5	ND	ND	ND	ND	ND	ND	ND
B	12:45		0.5	1	21.2	8	ND	ND	ND	ND	ND	ND	ND
C	12:50		0.1	1	21.1	8	ND	ND	ND	ND	ND	ND	ND
H	1:02		ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
I	1:07		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
D	1:13		0.1	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
K	1:16		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
T	1:25		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
U	1:28		ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
V	1:40		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
S	1:46		ND	1	21.2	3	ND	ND.	ND	ND	ND	ND	ND
P	1:50		ND	1	21.2	3	ND	ND	ND	ND	ND	ND	ND
E	1:55		ND	1	21.1	4	ND	ND	ND	ND	ND	ND	ND

* FID MALFUNCTIONING

HCL, HF, $COCl_2$ – SPM

Location A: Barkley and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

ENVIRONMENTAL RESPONSE TEAM
AIR MONITORING WORK SHEET

Page __ of __

Lockheed Martin Corp.
REAC Project, Edison, NJ
EPA Contract No. 68-C99-223

Site: WTC GR

WA #: 0-234

Prepared By: AD, SR, MG

EPA/ERT WAM: Singhvi

Date: 12/19/01

REAC Task Leader: BRADSTREET

LOCATION	SPM-HDI	SPM-MDI	SPM-TDI	Time
NORTH TOWER 1	0	~~1~~ 0	~~1~~ 2	1008
	2	0	2	1011
	0	0	1	1015
~~1~~ South Tower 1	0	0	1	1035
	4	0	2	1040
	0	0	2	1045
VISTA HOTEL	0	2	0	1050
	0	0	0	1055
	0	0	0	1100
B.D.H.	0	0	0	1110
	0	0	0	1115
	0	0	0	1120
TAGA	0	0	0	1230
	0	0	0	1236
	0	0	0	1241
Loc. A	5 ~~NA~~ 0	0	0	~~1300~~ 1255
	0	0	0	1300
	0	0	0	1304

General Comments:

ENVIRONMENTAL RESPONSE TEAM
AIR MONITORING WORK SHEET

Page __ of __

Lockheed Martin Corp.
REAC Project, Edison, NJ
EPA Contract No. 68-C99-223

Site: NYC ER

WA #: 0-236

Prepared By: AD, MH, SR

EPA/ERT WAM: Singhvi

Date: 12/19/01

REAC Task Leader: BRADSTREET

LOCATION	SPM-MDI	SPM-HDI	SPM-TDI	Time
A	0	0	0	1328
B	0	3	0	1338
C	0	0	0	1342
D	0	0	0	1416
F	0	0	0	1426
G	0	0	0	1432
E	0	0	0	1438

General Comments:

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12-20-01 (EARLY) RST: CANNON

Location	Time	FID (units)	FID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0816	ND	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
M1	0828	ND	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
N	0836	ND	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
J	0844	ND	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
Q	0852	ND	ND	ND	20.9	1.0	ND	ND	ND	ND	ND	ND	ND
F	0857	ND	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
A	0905	ND	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
B	0911	ND	ND	ND	20.8	1.0	ND	ND	ND	ND	ND	ND	ND
C	0918	ND	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
H	0935	ND	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
I	0944	ND	ND	ND	20.9	3.0	ND	ND	ND	ND	ND	ND	ND
D	0956	ND	ND	ND	20.9	~~ND~~ 2.0	ND	ND	ND	ND	ND	ND	ND
K	1002	ND	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
T	1010	ND	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
U	1016	ND	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
V	1024	ND	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
S	1045	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
P	1056	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
E	1100	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND

HCL, HF, $COCl_2$ GAS – SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12-20-01 (LATE) RST: CANNON

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	12:25	**	0.2	ND	21.1	8	ND	ND	ND	ND	ND	ND	ND
M1	12:30		2.4	ND	21.1	8	ND	ND	ND	ND	ND	ND	ND
N	12:35		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
J	12:41		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
Q	12:47		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
F	12:50		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
A	12:55		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
B	1:00		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
C	1:05		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
H	1:20		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
I	1:25		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
D	1:35		0.4	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
K	1:38		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
T	1:45		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
U	1:47		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
V	1:50		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
S	1:55		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
P	1:57		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	*
E	2:00		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	

* Battery Dead
** Out of hydrogen

HCL, HF, $COCl_2$ - SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Early

DATE: 12/21/01 (p.m.)

RST: Patrick Chan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	8:07	0.2	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
M1	8:13	0.2	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	8:20	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
J	8:33	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
Q	8:39	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
F	8:42	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
A	8:48	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
B	8:54	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
C	8:57	ND	0.6	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
H	9:10	ND	0.3	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
I	9:20	ND	0.1	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
D	9:25	ND	0.2	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
K	9:35	ND	0.2	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
T	9:50	ND	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
U	9:55	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
V	10:05	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
S	10:15	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
P	10:20	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
E	10:29	ND	0.1	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND

HCL, HF, $COCl_2$ → SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Late

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

(LATE)

DATE: 12/21/01

RST: Patrick Chan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	12:10	*	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
M1	12:15		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	12:20		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
J	12:25		0.5	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
Q	12:26		0.4	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
F	12:28		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
A	12:35		0.1	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
B	12:38		0.2	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
C	12:41		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
H	12:50		0.1	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
I	12:55		0.1	ND	21.1	5	ND	ND	ND	ND	ND	ND	ND
D	1:00		ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
K	1:05		ND	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
T	1:10		0.5	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
U	1:12		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
V	1:14		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
S	1:20		0.1	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
P	1:25		0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
E	1:27	↓	0.1	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND

* FLAME WOULD NOT RE-LIGHT

HF, HCl, $COCl_2$ — SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/22/01 (Early)

RST: Brennan, Adams, Chan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0810	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
N	0825	ND	0.1	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
M1	0833	ND	0.1	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
J	0840	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
Q	0844	ND	0.2	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
F	0851	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
A	0900	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
B	0907	ND	0.2	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
C	0914	ND	0.6	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
H	0925	ND	0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
I	0933	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
D	0941	ND	0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
K	0950	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
U	1004	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
V	1012	0.5	0.1	ND	21.1	ND	ND	ND	ND	ND	ND	0.7	ND
S	1029	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
P	1034	ND	0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
E	1042	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND

HCl, HF, $COCl_2$ – ppm

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/22/01 (LATE) RST: Patrick Chan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	12:16	*	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M1	12:20		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	12:25		0.2	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
J	12:29		0.1	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
Q	12:33		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
F	12:35		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
A	12:40		ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
B	12:44		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
C	12:48		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
H	12:55		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
I	12:58		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
D	1:05		0.1	ND	21.1	9	ND	ND	ND	ND	ND	ND	ND
K	1:15		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
T	1:20		0.4	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
U	1:22		0.2	ND	21.3	1	ND	ND	ND	ND	ND	ND	ND
V	1:24		0.1	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
S	1:30		0.1	ND	21.3	3	ND	ND	ND	ND	ND	ND	ND
P	1:33		0.5	ND	21.3	1	ND	ND	ND	ND	ND	ND	ND
E	1:35		0.1	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND

* PLANE WOULD LAT LIGHT, LOW HYDROGEN

HCl, HF, $COCl_2$ - SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
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Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

(EARLY)

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: ~~Aug~~ P.C. 12/23/01

RST: Patrick Chan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	8:17	ND	0.2	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
M1	8:30	ND	0.1	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
N	8:40	ND	0.3	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
J	8:47	ND	0.1	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
Q	8:53	ND	0.1	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
F	8:58	ND	0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
A	9:05	ND	0.1	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
B	9:13	ND	0.4	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
C	9:20	ND	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
H	9:30	ND	0.2	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
I	9:37	ND	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
D	9:45	ND	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
K	9:50	ND	0.5	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
T	10:00	ND	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
U	10:03	ND	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
V	10:05	ND	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
S	10:15	ND	0.1	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
P	10:20	ND	0.1	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
E	10:25	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND

HCl, HF, $COCl_2$ - SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/23/01 (LATE) RST: Patrick Chan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	12:05	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
M1	12:08	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
N	12:10	ND	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
J	12:15	ND	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
Q	12:17	ND	0.1	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
F	12:20	ND	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
A	12:25	ND	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
B	12:30	ND	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
C	12:35	ND	0.2	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
H	12:45	0.6	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
I	12:48	ND	0.5	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
D	12:50	ND	0.2	ND	21.3	6	ND	ND	ND	ND	ND	ND	ND
K	12:58	0.6	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
T	1:03	0.2	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
U	1:05	0.2	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
V	1:10	1.5	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
S	1:20	1.3	0.2	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
P	1:25	1.5	0.4	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
E	1:26	1.0	0.1	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND

HCl, HF, $COCl_2$ - SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/24/01 RST: Martyniak

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1231	ND	0.1	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
M1	1234	ND	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
N	1238	ND	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
J	1246	ND	0.1	ND	20.8	1.0	ND	ND	ND	ND	ND	ND	ND
Q	1252	ND	0.1	ND	20.8	1.0	ND	ND	ND	ND	ND	ND	ND
F	1254	ND	0.1	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
A	1259	0.9	0.5	ND	20.8	1.0	ND	ND	ND	ND	ND	ND	ND
C	1303	ND	0.2	ND	20.8	2.0	ND	ND	ND	ND	ND	ND	ND
B	1305	0.2	0.8	ND	20.8	4.0	ND	ND	ND	ND	ND	ND	ND
H	134	ND	0.1	ND	20.8	3.0	ND	ND	ND	ND	ND	ND	ND
I	1317	ND	0.1	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
D	1323	ND	0.3	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
K	1328	ND	0.3	ND	20.7	1.0	ND	ND	ND	ND	ND	ND	ND
U	1333	ND	0.1	ND	20.7	1.0	ND	ND	ND	ND	ND	ND	ND
V	1336	ND	0.1	ND	20.7	1.0	ND	ND	ND	ND	ND	ND	ND
S	1352	ND	0.1	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
P	1357	ND	0.1	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
E	1400	ND	0.2	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND

HCL, HF, $COCl_2$ - SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 5 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Patrick Chen

U.S. EPA: Norrell

Date: 12/19/01

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2647	2643	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	8:04	8:06	8:20			
Stop Time	14:24	14:25	14:29			
Run Time (Minutes)	379	379	369			
Minimum Concentration (ug/m3)	0.7	0.1	3.9			
Maximum Concentration (ug/m3)	204.0	305.8	140.6			
Average Concentration (TWA) (ug/m3)	25.7	33.6	22.3			

Page ___ of ___

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Brennan

U.S. EPA: Norrell

Date: 12-20-01

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2647	2643	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0811	0813	0836			
Stop Time	14:34	14:36	1440			
Run Time (Minutes)	382	383	363			
Minimum Concentration (ug/m3)	1.6	0.0	0.7			
Maximum Concentration (ug/m3)	118.5	153.8	116.3			
Average Concentration (TWA) (ug/m3)	10.7	11.4	8.0			

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Metzger

U.S. EPA: Norrell

Date: 11/21

RST Site Project Manager Brennan

Location	L	R	N			
DataRAM ID No.	2648	2646	2643			
Flow Rate (Liters / Minute)	2	2	2			
Start Time	0659	0658	0703			
Stop Time	1530	1524	1536			
Run Time (Minutes)	512	505	512			
Minimum Concentration (ug/m3)	3.4	3.5	4.1			
Maximum Concentration (ug/m3)	142.2	624.5	152.0			
Average Concentration (TWA) (ug/m3)	21.7	17.5	17.3			

CH

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Adams, Brennan, Chan

U.S. EPA: Norrell

Date: 12/22/01

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No	2643	2647	2646			
Flow Rate (Liters / Minute)	2.0L	2.0L	2.0L			
Start Time	0805	0809	0824			
Stop Time	14:01	14:05	14:08			
Run Time (Minutes)	355	355	343			
Minimum Concentration (ug/m3)	0.0	0.0	0.5			
Maximum Concentration (ug/m3)	151.4	163.9	27			
Average Concentration (TWA) (ug/m3)	8.1	4.5	4.6			

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Patrick Chan

U.S. EPA: Norrell

Date: 12/23/01

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2646	2647	2643			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	8:13	8:16	8:36			
Stop Time	13:54	13:56	13:59			
Run Time (Minutes)	340	340	322			
Minimum Concentration (ug/m3)	0.1	0.0	3.4			
Maximum Concentration (ug/m3)	337.7	880	440.8			
Average Concentration (TWA) (ug/m3)	25.1	27.4	24.7			

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/19/01

File Name	NYC504	NYC505	NYC506	NYC507	NYC509	NYC508
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07239	A07240	A07241	A07242
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb.	ppb.	ppb.	ppb.	ppb.	ppb.
Propylene	RL	RL	RL	RL	200	RL
Chlorodifluoromethane	RL	RL	RL	47	RL	RL
Dichlorodifluoromethane	RL	RL	RL	54	RL	88
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	220	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	23	RL	44
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	30	160	120
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	290
MTBE	RL	RL	RL	RL	RL	30
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	41
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	31	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	30	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	43
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	290	32
Heptane	RL	RL	RL	RL	RL	120
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobuty. Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	140	240
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	31
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	230	23
m&p-Xylenes	RL	RL	RL	RL	RL	54
o-Xylene	RL	RL	RL	RL	RL	25
Styrene	RL	RL	RL	RL	52	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/20/01

File Name	NYC513	NYC514	NYC515	NYC516	NYC518	NYC517
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07243	A07244	A07245	A07246
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	170	1900
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	190	5500
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	610
Chloroethane	RL	RL	RL	RL	RL	200
Trichlorofluoromethane	RL	RL	RL	RL	RL	22
Isopropyl Alcohol	RL	RL	RL	160	RL	1100
Acetone	RL	RL	RL	83	110	15000
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	32
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	44
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	160
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	22	1700
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	24
Tetrahydrofuran	RL	RL	RL	RL	23	360
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	35
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	130
Benzene	RL	RL	RL	RL	210	4400
Heptane	RL	RL	RL	RL	RL	170
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	29	RL	120
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	380
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	130	5900
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	21
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	150
Ethylbenzene	RL	RL	RL	RL	210	7300
m&p-Xylenes	RL	RL	RL	RL	RL	240
o-Xylene	RL	RL	RL	RL	RL	93
Styrene	RL	RL	RL	RL	42	2400
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	57
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	55
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	33
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	35
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/21/01

File Name	NYC448	NYC449	NYC450	NYC451	NYC453	NYC452
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower Plume	South Tower Plume
Sample Number			A07247	A07249	A07250	A07251
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	20 mL
Reporting Limit (RL)	20	20	20	20	20	250
Sample Conc. Units	ppb.	ppb.	ppb.	ppb.	ppb.	ppb.
Propylene	RL	RL	RL	RL	**240**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**540**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	**21**
Acetone	RL	RL	RL	RL	**590**	**120**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**29**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**130**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	**55**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**570**	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**170**	**29**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	**25**	RL
Ethylbenzene	RL	RL	RL	RL	**190**	RL
m&p-Xylenes	RL	RL	RL	RL	**26**	**37**
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	**61**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/22/01

File Name	NYC536	NYC537	NYC539	NYC540	NYC541	NYC543
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07252	A07253	A07254	A07255
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	100 mL
Reporting Limit (RL)	20	20	20	20	50	50
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	1100	2200
Chlorodifluoromethane	RL	RL	RL	RL	RL	74
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	1000	7000
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	1000
Chloroethane	RL	RL	RL	RL	RL	230
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	1400
Acetone	RL	RL	RL	150	2300	25000
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	86
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	68	240
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	31	550	2200
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	240	450
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	75
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	110
Benzene	RL	RL	RL	RL	980	5400
Heptane	RL	RL	RL	RL	RL	230
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	52	79	110
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	650
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	680	5100
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	51
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	280
Ethylbenzene	RL	RL	RL	RL	660	5800
m&p-Xylenes	RL	RL	RL	RL	110	440
o-Xylene	RL	RL	RL	RL	RL	150
Styrene	RL	RL	RL	RL	220	2500
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	80
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	130
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	140
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	70
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/23/01

File Name	NYC546	NYC547	NYC548	NYC549	NYC553	NYC554
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07256	A07259	A07257	A07258
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	100 mL
Reporting Limit (RL)	20	20	20	20	50	50
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	350	110
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	140	700
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	130	RL	RL
Acetone	RL	RL	RL	910	700	2100
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	55	54	150
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	4400	310
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	61
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	220	120
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	220	RL
Ethylbenzene	RL	RL	RL	RL	140	64
m&p-Xylenes	RL	RL	RL	RL	RL	58
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	100
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/26/01

File Name	NYC579	NYC580	NYC581	NYC582	NYC583	NYC585
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Ten:	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07268	A07269	A07270	A07271
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	100 mL
Reporting Limit (RL)	20	20	20	20	50	50
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	2700	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	1800	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	120	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	99	41	110	RL
Acetone	RL	RL	RL	270	5000	410
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	170	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	59	1100	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	25	530	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	4000	RL
Heptane	RL	RL	RL	RL	120	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	47	120	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	140	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	1700	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	95	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	75	RL
Ethylbenzene	RL	RL	RL	RL	1900	RL
m&p-Xylenes	RL	RL	RL	RL	300	RL
o-Xylene	RL	RL	RL	RL	130	RL
Styrene	RL	RL	RL	RL	680	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	100	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	120	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	73	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, December 28, 2001

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 2:00 p.m. on 12/28

Ambient Air Samples - lower Manhattan:

Particulate Monitoring - EPA used portable monitors to collect samples on December 27 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on December 27 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day. Benzene exceeded the OSHA standard at the North Tower debris pile. Two of three other samples taken at EPA's Wash Tent (West St. and Murray) and the South Tower debris pile showed no detectable levels of benzene.

Dioxin - Five samples were collected at Park Row (three samples) and at Chambers and West Street (two samples) at roof top locations. None of the samples were above the EPA action level based on a 30-year exposure.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on December 27. No significant readings were found.

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/27/01

File Name	NYC588	NYC589	NYC590	NYC591	NYC593	NYC595
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07272	A07273	A07274	A07275
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	100 mL
Reporting Limit (RL)	20	20	20	20	50	50
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**3800**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	**78**
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**4500**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	**180**	RL
Chloroethane	RL	RL	RL	RL	**80**	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	**32**	**150**	RL
Acetone	RL	RL	RL	**1300**	**11000**	**700**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**310**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**270**	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	**220**	**2000**	**95**
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	**140**	**1700**	**100**
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	**29**	**4400**	RL
Heptane	RL	RL	RL	RL	**230**	**67**
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	**110**	**340**	**68**
Methyl Isobutyl Ketone	RL	RL	RL	RL	**270**	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	**24**	**2700**	**160**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	**180**	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	**76**	RL
Ethylbenzene	RL	RL	RL	**44**	**3300**	**50**
m&p-Xylenes	RL	RL	RL	RL	**220**	RL
0-Xylene	RL	RL	RL	RL	**160**	RL
Styrene	RL	RL	RL	RL	**780**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	**67**	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	**82**	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/27/01 RST: H. Syverth Teams

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
R	0820	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
L	0824	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M	0830	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	0842	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
J	0851	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
Q	0913	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
F	0918	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
A	0926	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
C	0939	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
B	0947	ND	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
H	1008	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
I	1018	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
D	1032	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
K	1045	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
P	1049	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
U	1100	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
V	1110	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
S	1120	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
E	1125	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND

* - Multi-RAE PID Malfunction
ND - Non-Detect

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday - Monday, December 29 - 31, 2001

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:00 p.m. on 12/31

Air: Fixed Monitors in New York:
Asbestos - EPA analyzed 253 samples taken in and around ground zero from December 19 through December 26. In addition, EPA sampled for asbestos at three lower Manhattan locations from December 18 through 24. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,025, with 29 samples above the standard (27 of these were collected prior to September 30, one was collected on October 9 and the other on November 27).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Public School 154 (33 East 135th St., Bronx), Intermediate School 143 (511 W. 182nd St., Manhattan), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) from December 18 through 24. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - One hundred thirty-seven air samples collected from December 20 through 28 were analyzed for asbestos. All were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on December 20 and 27-30 at the Staten Island Landfill. An increased reading was noted on Dec. 27 and 30. No other significant readings reported.

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from December 21 through 28 at Pace University, Borough of Manhattan Community College, the Coast Guard building in Battery Park and on Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all

stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM10 - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from December 21 through 28 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Particulate Monitoring - EPA used portable monitors to collect samples December 28 through 30 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on December 25 and December 28 to 30 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day. Benzene exceeded the OSHA standard on December 25 at the North Tower debris pile. There were no exceedances for benzene on the other three days. Eleven of fifteen other samples taken at EPA's Wash Tent (West St. and Murray) and the South Tower debris pile showed no detectable levels of benzene.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds from December 28 to 30. No significant readings were found.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, December 31, 2001

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Dec 19, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Dec 20, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Dec 20, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume recorded.

NYC / ER (Dec 21, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location V-duplicate) was not collected due to equipment malfunction.
Note: Low sample volumes recorded.

NYC / ER (Dec 21, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location T) was not collected since access to that location was not available.

NYC / ER (Dec 22, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location T) was not collected since access to that location was not available.

NYC / ER (Dec 22, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled.

NYC / ER (Dec 23, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled.

NYC / ER (Dec 23, 1200 - 2359)

All 20 samples analyzed were below the TEM AHERA standard.
1 sample (Location C) was not collected due to equipment malfunction.
1 location (Location T) was not sampled.

NYC / ER (Dec 24, 0001 - 1200)

All 23 samples analyzed were below the TEM AHERA standard.
Results include 2 samples from Location T that were previously set up on Dec. 21 and 22 but were not accessible on those days (see items listed above for those days).
1 location (Location T) was not sampled.

NYC / ER (Dec 24, 1200 - 2359)

Results pending.

NYC / ER (Dec 25, 0001 - 1200)

Results pending.

NYC / ER (Dec 25, 1200 - 2359 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
2 locations (Locations I and T) were not sampled.
Note: Low sample volumes recorded.

NYC / ER (Dec 26, 0001 - 1200 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled.

Landfill Ambient Air Sampling Locations

Fresh Kills (Dec 20, 0842 - 2158) - Asbestos

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-6) was not collected since high winds blew sample off pump.

Fresh Kills (Dec 21, 0750 - 2204) - Asbestos

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-6) was not collected since high winds blew sample off pump.
1 location (Location O-17) was not sampled.

Fresh Kills (Dec 22, 0820 - 2200) - Asbestos

All 18 samples analyzed were below the TEM AHERA standard.
1 location (Location O-19) was not sampled.

Fresh Kills (Dec 23, 0810 - 2145) - Asbestos

All 16 samples analyzed were below the TEM AHERA standard.
1 sample (Location W-11) was not collected due to equipment malfunction.
1 sample (Location O-17) was not collected since access to that location was not available.
1 location (Location O-19) was not sampled.
Note: Low sample volume recorded.

Fresh Kills (Dec 24, 0905 - Dec 25, 0005) - Asbestos

All 15 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-6) was not collected since high winds blew sample off pump.
1 sample (Location B-13) was not collected due to equipment malfunction.
1 sample (Location O-17) was not collected since access to that location was not available.
1 location (Location O-19) was not sampled.

Fresh Kills (Dec 26, 0758 - 2205) - Asbestos

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location B-14) was not collected due to equipment malfunction.

Fresh Kills (Dec 27, 0757 - 2235) - Asbestos

All 17 samples analyzed were below the TEM AHERA standard.
2 sample (Locations W-11 and MPHS-20) were not analyzed due to overloading of particulates.

Fresh Kills (Dec 28, 0756 - 2143) - Asbestos

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location O-18) was not collected due to equipment malfunction.

Fresh Kills (Dec 20) - Particulate Monitoring (Dataram)

Nothing of significance reported at two stations (P-1 and P-8) based on daily average concentrations.

Fresh Kills (Dec 27) - Particulate Monitoring (Dataram)

Increased readings noted at one (P-1) of three stations (P-1, P-2, and P-3) based on daily average concentrations.

Fresh Kills (Dec 28) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-1, P-2, P-3) based on daily average concentrations.

Fresh Kills (Dec 29) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-1, P-2, P-3) based on daily average concentrations.

Fresh Kills (Dec 30) - Particulate Monitoring (Dataram)

Increased readings noted at one (P-1) of three stations (P-1, P-2, and P-3) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Dec 21) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***7.20 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***7.75 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***6.12 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***8.86 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 21) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***24.83 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 22) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***7.92 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.58 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***6.31 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***11.53 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 22) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***23.47 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 23) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***13.34 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***14.64 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***13.42 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***15.10 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 23) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***23.89 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 24) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***12.16 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.77 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***10.05 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***11.23 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 24) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***15.35 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 25) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***7.58 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***7.31 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***6.94 ug/m³***.

Wall Street - 24-hour average concentrations for this period was ***8.09 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 25) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***11.03 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 26) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.20 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.56 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***10.21 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***14.06 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 26) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***28.37 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 27) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***14.92 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.96 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***10.15 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***12.87 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 27) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***21.38 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 28) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***15.03 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.71 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was ***9.83 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***12.78 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 28) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***24.52 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 18 - 24) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Coast Guard Building: Battery Park (Site 3)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 48 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
2 samples (Site 6 on Dec. 18 and Site 9 on Dec. 23) were not collected due to equipment malfunctions.
6 locations (Sites 6 and 7 on Dec. 21, Sites 3, 7, and 8 on Dec. 23, and Site 3 on Dec. 24) were not sampled.

NYC / ER (Dec 28) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 15.1 to 554.3 ug/m^3 with an average of 41.6 ug/m^3.
Station N values ranged from 8.4 to 100.0 ug/m^3 with an average of 20.3 ug/m^3.
Station R values ranged from 1.9 to 88.9 ug/m^3 with an average of 23.9 ug/m^3.

NYC / ER (Dec 29) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 18.8 to 174.3 ug/m^3 with an average of 35.4 ug/m^3.
Station N values ranged from 14.2 to 131.2 ug/m^3 with an average of 23.7 ug/m^3.
Station R values ranged from 9.6 to 99.9 ug/m^3 with an average of 23.2 ug/m^3.

NYC / ER (Dec 30) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 to 6½ hours.
Station L values ranged from 0.1 to 139.4 ug/m^3 with an average of 14.5 ug/m^3.
Station N values ranged from 0.1 to 82.8 ug/m^3 with an average of 13.7 ug/m^3.
Station R values ranged from 1.2 to 53.2 ug/m^3 with an average of 19.1 ug/m^3.

NYC / ER (Dec 25) - Volatile Organics (Mobile Laboratory)

Incorrectly noted in December 27 Sampling Situation Report that no samples were collected on this day.
Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
2 of the 3 of the other samples (Washing Tent and Austin Tobin Plaza) did not note any benzene above the detection limit (20 ppbv).

NYC / ER (Dec 28) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (ranging from 20 ppbv to 50 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, South Tower), including in the debris area at ground level.

NYC / ER (Dec 29) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, South Tower), including in the debris area at ground level.

NYC / ER (Dec 30) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, South Tower), including in the debris area at ground level.

Direct Reading Instruments

NYC / ER (Dec 28)

Nothing of significance reported.

NYC / ER (Dec 29)

Nothing of significance reported.

NYC / ER (Dec 30)

Nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/19/01 1200 to 2359

Data Validation Date: 12/22/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
12/19/01	RST-02143	L	720	Air	7.64	0.004	0	0	<7.87	<0.0042
12/19/01	RST-02144	L-Dup	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	RST-02145	M-1	720	Air	10.19	0.005	0	0	<8.75	<0.0047
12/19/01	RST-02146	N	695	Air	<7.0	<0.004	0	0	<8.75	<0.0048
12/19/01	RST-02147	N-Dup	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/19/01	RST-02148	J	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	RST-02149	Q	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	RST-02150	F	720	Air	10.19	0.005	0	0	<8.75	<0.0047
12/19/01	RST-02151	A	720	Air	7.64	0.004	1***	0	8.75	0.0047
12/19/01	RST-02152	B	720	Air	NA(1)	NA(1)	0	0	<8.75	<0.0047
12/19/01	RST-02153	C	720	Air	8.28	0.004	0	0	<8.75	<0.0047
12/19/01	RST-02154	H	1224*	Air	11.46	0.004	0	0	<15.75	<0.0050
12/19/01	RST-02155	I	720	Air	8.92	0.005	0	0	<8.75	<0.0047
12/19/01	RST-02156	D	720	Air	10.83	0.006	0	0	<8.75	<0.0047
12/19/01	RST-02157	K	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	RST-02158	T	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	RST-02159	U	720	Air	7.01	0.004	0	0	<8.75	<0.0047
12/19/01	RST-02160	V	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/19/01	RST-02161	S	662	Air	<7.0	<0.004	0	0	<8.75	<0.0051
12/19/01	RST-02162	P	720	Air	10.83	0.006	0	0	<8.75	<0.0047
12/19/01	RST-02163	E	1224*	Air	7.64	0.002	0	0	<8.75	<0.0028
12/19/01	RST-02164	W	463	Air	NS	NS	NS	NS	NS	NS
12/20/01	FB122001	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/20/01	TB122001	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method, except for samples RST-02154 and RST-02163; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-19-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/20/01 0001 to 1200

Data Validation Date: 12/22/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/20/01	RST-02165	L	708	Air	8.92	0.005	0	0	<8.75	<0.0048
12/20/01	RST-02166	M-1	720	Air	8.92	0.005	0	0	<8.75	<0.0047
12/20/01	RST-02167	M1-Dup	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/20/01	RST-02168	N	1224*	Air	7.01	0.002	0	0	<15.75	<0.0050
12/20/01	RST-02169	J	714	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	RST-02170	J-Dup	720	Air	12.10	0.0065	0	0	<8.75	<0.0047
12/20/01	RST-02171	Q	870.4	Air	8.92	0.004	0	0	<11.25	<0.0050
12/20/01	RST-02172	F	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	RST-02173	A	720	Air	10.19	0.005	0	0	<8.75	<0.0047
12/20/01	RST-02174	B	720	Air	8.92	0.005	0	0	<8.75	<0.0047
12/20/01	RST-02175	C	720	Air	11.46	0.006	0	0	<8.75	<0.0047
12/20/01	RST-02176	H	720	Air	10.19	0.005	0	0	<8.75	<0.0047
12/20/01	RST-02177	I	720	Air	10.19	0.005	0	0	<8.75	<0.0047
12/20/01	RST-02178	D	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	RST-02179	K	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	RST-02180	T	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	RST-02181	U	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	RST-02182	V	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	RST-02183	S	720	Air	7.01	0.004	0	0	<8.75	<0.0047
12/20/01	RST-02184	P	244	Air	<7.0	<0.011	0	0	<7.87	<0.0124
12/20/01	RST-02185	E	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	RST-02186	W	323	Air	<7.0	<0.008	0	0	<7.87	<0.0094
12/20/01	FB122001	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/20/01	TB122001	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method except for sample RST-02168; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-20-01-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/20/01 1200 to 2359

Data Validation Date: 12/27/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/20/01	RST-02187	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02188	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02189	N	36****	Air	<7.0	<0.075	0	0	<8.00	<0.0856
12/20/01	RST-02190	J	720	Air	8.92	0.005	0	0	<8.89	<0.0048
12/20/01	RST-02191	Q	720	Air	8.28	0.004	0	0	<8.89	<0.0048
12/20/01	RST-02192	F	720	Air	<7.0	<0.004	0	5***	44.44	0.0238
12/20/01	RST-02193	A	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/20/01	RST-02194	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02195	C	710	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02196	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02197	I	526	Air	<7.0	<0.005	0	0	<8.00	<0.0059
12/20/01	RST-02198	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02199	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02200	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02201	T-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02202	U	568	Air	<7.0	<0.005	0	0	<8.00	<0.0054
12/20/01	RST-02203	U-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02204	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02205	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02206	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02207	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/20/01	RST-02208	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	FB122101	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/21/01	TB122101	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
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Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected.

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-20-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/21/01 0001 to 1200

Data Validation Date: 12/27/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/21/01	RST-02209	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02210	M-1	11****	Air	<7.0	<0.245	0	0	<8.00	<0.2800
12/21/01	RST-02211	N	687	Air	8.28	0.005	0	0	<8.00	<0.0045
12/21/01	RST-02212	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02213	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02214	F	244	Air	<7.0	<0.011	0	0	<8.00	<0.0126
12/21/01	RST-02215	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02216	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02217	C	263	Air	<7.0	<0.010	0	0	<8.00	<0.0117
12/21/01	RST-02218	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02219	I	422	Air	<7.0	<0.006	0	0	<8.00	<0.0073
12/21/01	RST-02220	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02221	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02222	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02223	U	720	Air	<7.0	<0.004	0	2***	17.78	0.0095
12/21/01	RST-02224	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	-	V-Duplicate	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	RST-02225	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02226	S-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02227	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02228	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02229	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	FB122101	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/21/01	TB122101	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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M1 : West St. - 50 yards south of Harrison St. at bulkhead
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Key:

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Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-21-01-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/21/01 1200 to 2359

Data Validation Date: 12/26/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S-f/cc**
12/21/01	RST-02230	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02231	M1	720	Air	8.92	0.005	0	0	<8.89	<0.0048
12/21/01	RST-02232	N	720	Air	8.28	0.004	0	0	<8.89	<0.0048
12/21/01	RST-02233	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02234	Q	720	Air	7.64	0.004	0	0	<8.89	<0.0048
12/21/01	RST-02235	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02236	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02237	B	720	Air	10.19	0.005	0	0	<8.89	<0.0048
12/21/01	RST-02238	C	720	Air	8.92	0.005	0	0	<8.89	<0.0048
12/21/01	RST-02239	H	720	Air	7.01	0.004	0	0	<8.89	<0.0048
12/21/01	RST-02240	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02241	I	700	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/21/01	RST-02242	D	720	Air	7.64	0.004	0	0	<8.89	<0.0048
12/21/01	RST-02243	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	-	T	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	RST-02244	U	695	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/21/01	RST-02245	V	700	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/21/01	RST-02246	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02247	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02248	P-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02249	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02250	W	720	Air	17.83	0.0095	0	0	<8.89	<0.0048
12/22/01	FB122201	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/22/01	TB122201	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-21-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/22/01 0001 to 1200

Data Validation Date: 12/26/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/22/01	RST-02251	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02252	M-1	620	Air	<7.0	<0.004	0	0	<8.00	<0.0050
12/22/01	RST-02253	N	680	Air	<7.0	<0.004	0	0	<8.00	<0.0045
12/22/01	RST-02254	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02255	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02256	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02257	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02258	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02259	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02260	H	716	Air	8.92	0.005	0	0	<8.89	<0.0048
12/22/01	RST-02261	I	696	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/22/01	RST-02262	I-Duplicate	691	Air	10.19	0.006	0	0	<8.00	<0.0045
12/22/01	RST-02263	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02264	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	-	T	NS	Air	NS	NS	NS	NS	NS	NS
12/22/01	RST-02265	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02266	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02267	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02268	P	710	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02269	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02270	E-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02271	W	636	Air	7.64	0.005	0	0	<8.00	<0.0048
12/22/01	FB122201	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/22/01	TB122201	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Key:

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FL-12-22-01-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/22/01 1200 to 2359

Data Validation Date: 12/26/0

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/22/01	RST-02272	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02273	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02274	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02275	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02276	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02277	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02278	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02279	A-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02280	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02281	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02282	C-Duplicate	693	Air	<7.0	<0.004	0	0	<8.00	<0.0044
12/22/01	RST-02283	H	467	Air	<7.0	<0.006	0	0	<8.00	<0.0066
12/22/01	RST-02284	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02285	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02286	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02287	U	720	Air	7.01	0.004	0	0	<8.89	<0.0048
12/22/01	RST-02288	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02289	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02290	P	248	Air	<7.0	<0.011	0	0	<8.00	<0.0124
12/22/01	RST-02291	E	6****	Air	<7.0	<0.450	0	0	<8.00	<0.5133
12/22/01	RST-02292	W	720	Air	15.92	0.009	0	0	<8.89	<0.0048
12/23/01	FB122301	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/23/01	TB122301	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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NS - Sample not submitted at this time

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-22-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/23/01 0001 to 1200

Data Validation Date: 12/26/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
12/23/01	RST-02293	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02294	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02295	N	649	Air	<7.0	<0.004	0	0	<8.00	<0.0047
12/23/01	RST-02296	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02297	Q	479	Air	<7.0	<0.006	0	0	<8.00	<0.0064
12/23/01	RST-02298	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02299	A	383	Air	<7.0	<0.007	0	0	<8.00	<0.0080
12/23/01	RST-02300	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02301	B-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02302	C	720	Air	7.64	0.004	0	0	<8.89	<0.0048
12/23/01	RST-02303	H	704	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/23/01	RST-02304	I	512	Air	<7.0	<0.005	0	0	<8.00	<0.0060
12/23/01	RST-02305	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02306	D-Duplicate	720	Air	7.01	0.004	0	0	<8.89	<0.0048
12/23/01	RST-02307	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02308	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02309	V	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02310	S	713	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02311	P	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02312	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02313	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	FB122301	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/23/01	TB122301	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading.
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted at this time

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-23-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/20/01 0842 to 2158

Data Validation Date: 12/22/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/20/01	LF01691	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01692	P-2	531	Air	<7.0	<0.005	0	0	<8.75	<0.0063
12/20/01	LF01693	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01694	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01695	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01696	P-6	NS	Air	NS	NS	NS	NS	NS	NS
12/20/01	LF01697	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01698	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01699	W-11	720	Air	11.46	0.006	0	1***	8.75	0.0047
12/20/01	LF01700	W-12A	720	Air	11.46	0.006	4***	0	35.00	0.0187
12/20/01	LF01701	W-12B	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
12/20/01	LF01702	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01703	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01704	T-15	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01705	T-16	720	Air	7.64	0.004	1***	1***	17.50	0.0094
12/20/01	LF01706	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01707	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01708	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01709	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/20/01	LF01710	Lot Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)
12/20/01	LF01711	Trip Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-20-01-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/18/01 1200 to 2400

Data Validation Date: 12/22/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
12/18/01	7093-18-0082	Park Row	1344	Air	8.92	0.003	0	0	<15.75	<0.0045
12/18/01	7093-19-0082	Chambers Street	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
12/18/01	7093-20-0082	Coast Guard	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
12/18/01	7093-15-0081	Manhattan PS #143	NS	Air	NS	NS	NS	NS	NS	NS
12/18/01	7094-09-0071	Bronx PS #154	1420	Air	<7.0	<0.002	0	0	<15.75	<0.0043
12/18/01	7096-12-0076	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
12/18/01	7095-98-0078	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
12/18/01	7097-18-0074	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-18-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/19/01 1200 to 2400

Data Validation Date: 12/27/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/19/01	[a] 7093-18-	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/19/01	[a] 7093-19-	Chambers Street	1032***	Air	<7.0	<0.003	0	0	<11.43	<0.0043
12/19/01	[a] 7093-20-	Coast Guard	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/19/01	7093-15-0082	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/19/01	7094-09-0072	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/19/01	7096-12-0077	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/19/01	7095-98-0079	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/19/01	7097-18-0075	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable
[a] Sample number was incomplete.

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-19-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/20/01 1200 to 2400

Data Validation Date: 12/26/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/20/01	7093-18-0084	Park Row	1340	Air	<7.0	<0.002	0	0	<16.00	<0.0046
12/20/01	7093-19-0084	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7093-20-0084	Coast Guard	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7093-15-0083	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7094-09-0073	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7096-12-0078	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7095-98-0080	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7097-18-0076	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-20-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/21/01 1200 to 2400

Data Validation Date: 12/26/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc*
12/21/01	7093-18-0085	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/21/01	7093-19-0085	Chambers Street	1340	Air	<7.0	<0.002	0	0	<16.00	<0.0046
12/21/01	7093-20-0085	Coast Guard	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
12/21/01	-	Manhattan PS #143	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	7094-09-0074	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/21/01	7096-12-0079	Queens PS #199	1270	Air	<7.0	<0.002	0	0	<16.00	<0.0049
12/21/01	-	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	7097-18-0077	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/25/01 1200 to 2359

Data Validation Date: 12/30/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S-f/cc**
12/25/01	RST-02398	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02399	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02400	N	185****	Air	<7.0	<0.015	0	0	<8.00	<0.0166
12/25/01	RST-02401	N-Duplicate	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/25/01	RST-02402	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02403	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02404	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02405	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02406	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02407	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02408	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	-	I	NS	NS	NS	NS	NS	NS	NS	NS
12/25/01	RST-02409	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02410	K	720	Air	<7.0	<0.004	2***	0	17.78	0.0095
12/25/01	RST-02411	U	239	Air	<7.0	<0.011	0	0	<8.89	<0.0143
12/25/01	RST-02412	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02413	S	620	Air	<7.0	<0.004	0	0	<8.89	<0.0055
12/25/01	RST-02414	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02415	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02416	W	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	FB122601	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/26/01	TB122601	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (filters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-25-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/26/01 0001 to 1200

Data Validation Date: 12/30/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/26/01	RST-02417	L	688	Air	<7.0	<0.004	0	0	<8.00	<0.0045
12/26/01	RST-02418	M-1	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	RST-02419	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02420	J	668	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/26/01	RST-02421	Q	680	Air	<7.0	<0.004	3***	1***	32.00	0.0181
12/26/01	RST-02422	F	720	Air	<7.0	<0.004	4***	0	35.56	0.0190
12/26/01	RST-02423	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02424	B	652	Air	<7.0	<0.004	1***	0	8.00	0.0047
12/26/01	RST-02425	B-Dup	718	Air	<7.0	<0.004	2***	0	17.78	0.0095
12/26/01	RST-02426	C	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	RST-02427	H	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	RST-02428	I	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	RST-02429	D	720	Air	<7.0	<0.004	1***	2***	26.67	0.0143
12/26/01	RST-02430	K	669	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/26/01	RST-02431	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02432	V	446	Air	<7.0	<0.006	0	0	<8.00	<0.0069
12/26/01	RST-02433	S	668	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/26/01	RST-02434	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02435	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02436	W	518	Air	<7.0	<0.005	1***	0	8.00	0.0059
12/26/01	FB122601	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/26/01	TB122601	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-26-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/21/01 0750 to 2204

Data Validation Date: 12/27/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/21/01	LF01712	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01713	P-2	666	Air	<7.0	<0.004	0	0	<7.87	<0.0046
12/21/01	LF01714	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01715	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01716	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01717	P-6	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	LF01718	P-7	695	Air	<7.0	<0.004	0	0	<8.75	<0.0048
12/21/01	LF01719	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01720	W-11	720	Air	8.92	0.005	0	0	<8.75	<0.0047
12/21/01	LF01721	W-12A	720	Air	10.19	0.005	0	0	<8.75	<0.0047
12/21/01	LF01722	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01723	B-13	716	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01724	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01725	T-15	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01726	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01727	O-17	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	LF01728	O-18	700	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01729	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01730	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/21/01	LF01731	Lot Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)
12/21/01	LF01732	Trip Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-21-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/22/01 0820 to 2200[a]

Data Validation Date: 12/30/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/22/01	LF01733	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01734	P-2	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01735	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01736	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01737	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01738	P-6	615	Air	<7.0	<0.004	0	0	<8.75	<0.0055
12/22/01	LF01739	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01740	P-8	720	Air	<7.0	<0.004	2***	1***	26.25	0.0140
12/22/01	LF01741	W-11	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01742	W-12A	720	Air	19.11	0.010	0	0	<8.75	<0.0047
12/22/01	LF01743	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01744	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01745	B-14	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
12/22/01	LF01746	T-15	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
12/22/01	LF01747[a]	T-16	1386	Air	<7.0	<0.002	0	0	<8.75	<0.0024
12/22/01	LF01748	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01749	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01750	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/22/01	LF01751	Lot Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
12/22/01	LF01752	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]

Key:

* Sample volume (filters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA [1] - Not analyzed due to overloading of particulates
NA [2] - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted
[a] - Sample LF01747 (T-16) was collected 12/22/01 1005 to 12/23/01 0911

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-22-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/23/01 0810 to 2145

Data Validation Date: 12/28/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/23/01	LF01753	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01754	P-2	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01755	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01756	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01757	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01758	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01759	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01760	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01761	W-11	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)
12/23/01	LF01762	W-12A	720	Air	15.29	0.008	0	0	<8.75	<0.0047
12/23/01	LF01763	W-12B	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/23/01	LF01764	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01765	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01766	T-15	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01767	T-16	720	Air	26.75	0.014	0	0	<8.75	<0.0047
12/23/01	LF01768	O-17	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)
12/23/01	LF01769	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/23/01	LF01770	MPHS-20	110****	Air	<7.0	<0.025	0	0	<8.75	<0.0306
12/23/01	LF01771	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/23/01	LF01772	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS(1) - Sample not submitted due to no sample volume
NS(2) - Sample not submitted at this time due to no access to station location

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-23-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/24/01 0905 to 12/25/01 0005[a]

Data Validation Date: 12/28/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/24/01	LF01773	P-1	900	Air	<7.0	<0.003	0	0	<11.25	<0.0048
12/24/01	LF01774	P-2	564	Air	<7.0	<0.005	0	0	<7.87	<0.0054
12/24/01	LF01775	P-3	804	Air	<7.0	<0.003	0	0	<9.84	<0.0047
12/24/01	LF01776	P-4	775	Air	<7.0	<0.003	0	0	<9.84	<0.0049
12/24/01	LF01777	P-5	788	Air	<7.0	<0.003	0	0	<9.84	<0.0048
12/24/01	LF01778	P-6	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)
12/24/01	LF01779	P-7	748	Air	<7.0	<0.004	0	0	<8.75	<0.0045
12/24/01	LF01780	P-8	834	Air	<7.0	<0.003	0	0	<9.84	<0.0045
12/24/01	LF01781	W-11	830	Air	<7.0	<0.003	0	0	<9.84	<0.0046
12/24/01	LF01782	W-12A	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/24/01	LF01783	W-12B	809	Air	<7.0	<0.003	0	0	<9.84	<0.0047
12/24/01	LF01784	B-13	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)
12/24/01	LF01785	B-14	507	Air	<7.0	<0.005	0	0	<7.87	<0.0060
12/24/01	LF01786(a)	T-15	2638	Air	<7.0	<0.001	0	0	<19.69	<0.0029
12/24/01	LF01787(a)	T-16	2647	Air	<7.0	<0.001	0	0	<19.69	<0.0029
12/24/01	LF01788	O-17	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)
12/24/01	LF01789	O-18	800	Air	<7.0	<0.003	0	0	<9.84	<0.0047
12/24/01	LF01790	MPHS-20	839	Air	<7.0	<0.003	0	0	<9.84	<0.0045
12/24/01	LF01791	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/24/01	LF01792	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS(1) - Sample not submitted due to no sample volume
NS(2) - Sample not submitted at this time due to no access to station location
(a) - Sample LF01786 (T-15) was collected 12/24/01 0940 to 12/26/01 0538
Sample LF01787 (T-16) was collected 12/24/01 0943 to 12/26/01 0550

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-24-01-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/22/01 1200 to 2400 and 12/21/01 1200 to 2400 (for sample 7093-15-0084)

Data Validation Date: 12/30/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/22/01	7093-18-0086	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/22/01	7093-19-0086	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/22/01	7093-20-0086	Coast Guard	1408	Air	<7.0	<0.002	0	0	<16.00	<0.0044
12/21/01	7093-15-0084	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/22/01	7094-09-0075	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/22/01	7096-12-0080	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/22/01	7095-98-0081	Brooklyn PS #274	1136***	Air	<7.0	<0.002	0	0	<13.33	<0.0045
12/22/01	7097-18-0078	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-22-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/23/01 1200 to 2400

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/23/01	7093-18-0087	Park Row	1234	Air	<7.0	<0.002	0	0	<13.33	<0.0042
12/23/01	7093-19-0087	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
-	-	Coast Guard	NS	Air	NS	NS	NS	NS	NS	NS
12/23/01	7093-15-0085	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/23/01	7094-09-0076	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/23/01	7096-12-0081	Queens PS #199	NR	Air	NR	NR	NR	NR	NR	NR
-	-	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS
-	-	Staten Island PS #44	NS	Air	NS	NS	NS	NS	NS	NS

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-23-01pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/23/01 1200 to 2359

Data Validation Date: 12/27/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/23/01	RST-02314	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02315	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02316	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02317	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02318	M1	451	Air	<7.0	<0.006	0	0	<8.00	<0.0068
12/23/01	RST-02319	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02320	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02321	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02322	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02323	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	-	C	NS	NS	NS	NS	NS	NS	NS	NS
12/23/01	RST-02324	H	698	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/23/01	RST-02325	I	599	Air	<7.0	<0.0045	0	0	<8.00	<0.0051
12/23/01	RST-02326	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02327	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02328	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02329	V	514	Air	<7.0	<0.005	0	0	<8.00	<0.0060
12/23/01	RST-02330	S	366	Air	<7.0	<0.007	0	0	<8.00	<0.0084
12/23/01	RST-02331	P	390	Air	<7.0	<0.007	0	0	<8.00	<0.0079
12/23/01	RST-02332	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02333	W	720	Air	<7.0	<0.004	0	1***	8.89	0.0048
12/24/01	FB122401	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/24/01	TB122401	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-23-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/24/01 0001 to 1200

Data Validation Date: 12/27/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/24/01	RST-02334	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02335	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02336	M1-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02337	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02338	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02339	J-Duplicate	680	Air	<7.0	<0.004	1***	0	8	0.0045
12/24/01	RST-02340	Q	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/24/01	RST-02341	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02342	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02343	C	584	Air	<7.0	<0.005	0	0	<8.89	<0.0059
12/24/01	RST-02344	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02345	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02346	I	477	Air	<7.0	<0.006	0	0	<8.00	<0.0065
12/24/01	RST-02347	D	366	Air	<7.0	<0.007	0	0	<8.00	<0.0084
12/24/01	RST-02348	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02349	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02350	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02351	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02352	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02353	E	693	Air	<7.0	<0.004	0	0	<8.00	<0.0044
12/24/01	RST-02354	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02355	T(1)	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/22/01	RST-02356	T(2)	672	Air	<7.0	<0.004	0	0	<8.89	<0.0051
12/24/01	FB122401	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/24/01	TB122401	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
T(1) - Sample collected on 12/21/01 1200 to 2359
T(2) - Sample collected on 12/22/01 0001 to 1200

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-24-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/26/01 0758 to 2205

Data Validation Date: 12/30/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/26/01	LF01793	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01794	P-2	578	Air	10.19	0.007	1***	0	8.75	0.0058
12/26/01	LF01795	P-3	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/26/01	LF01796	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01797	P-5	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/26/01	LF01798	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01799	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01800	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01801	W-11	720	Air	10.19	0.005	0	1****	8.75	0.0047
12/26/01	LF01802	W-12A	720	Air	20.38	0.011	0	0	<8.75	<0.0047
12/26/01	LF01803	W-12B	720	Air	9.55	0.005	0	0	<8.75	<0.0047
12/26/01	LF01804	B-13	720	Air	12.74	0.007	2***	0	17.50	0.0094
-	LF01805	B-14	NS	Air	NS	NS	NS	NS	NS	NS
12/26/01	LF01806	T-15	720	Air	14.65	0.008	0	0	<8.75	<0.0047
12/26/01	LF01807	T-16	720	Air	14.01	0.0075	0	1***	8.75	0.0047
12/26/01	LF01808	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01809	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01810	O-19	533	Air	<7.0	<0.004	0	0	<8.75	<0.0063
12/26/01	LF01811	MPHS-20	707	Air	7.64	0.004	0	0	<8.75	<0.0048
12/26/01	LF01812	Lot Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)
12/26/01	LF01813	Trip Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-26-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/27/01 0757 to 2235

Data Validation Date: 12/30/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/27/01	LF01814	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01815	P-2	548	Air	<7.0	<0.005	1***	0	8.75	0.0061
12/27/01	LF01816	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01817	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01818	P-5	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
12/27/01	LF01819	P-6	611	Air	<7.0	<0.004	0	0	<8.75	<0.0055
12/27/01	LF01820	P-7	704	Air	<7.0	<0.004	0	0	<8.75	<0.0048
12/27/01	LF01821	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01822	W-11	720	Air	NA(1)	NA(1)	NA(1)	NA(1)	NA(1)	NA(1)
12/27/01	LF01823	W-12A	720	Air	NA(1)	NA(1)	0	0	<8.75	<0.0047
12/27/01	LF01824	W-12B	720	Air	<7.0	<0.004	5***	0	43.74	0.0234
12/27/01	LF01825	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01826	B-14	675	Air	<7.0	<0.004	0	0	<8.75	<0.0050
12/27/01	LF01827	T-15	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/27/01	LF01828	T-16	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
12/27/01	LF01829	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01830	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01831	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01832	MPHS-20	720	Air	<7.0	<0.004	NA(1)	NA(1)	NA(1)	NA(1)
12/27/01	LF01833	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/27/01	LF01834	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-27-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/28/01 0756 to 2143

Data Validation Date: 12/30/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/28/01	LF01835	P-1	720	Air	8.92	0.005	0	1***	8.75	0.0047
12/28/01	LF01836	P-2	576	Air	8.92	0.006	0	0	<7.87	<0.0053
12/28/01	LF01837	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01838	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01839	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01840	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01841	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01842	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01843	W-11	720	Air	10.19	0.005	0	0	<8.75	<0.0047
12/28/01	LF01844	W-12A	720	Air	15.29	0.008	0	0	<8.75	<0.0047
12/28/01	LF01845	W-12B	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/28/01	LF01846	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01847	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01848	T-15	720	Air	11.46	0.006	0	0	<8.75	<0.0047
12/28/01	LF01849	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01850	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01851	O-18	NS	NS	NS	NS	NS	NS	NS	NS
12/28/01	LF01852	O-19	674	Air	<7.0	<0.004	0	0	<8.75	<0.0050
12/28/01	LF01853	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01854	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/28/01	LF01855	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-28-01-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/24/01 1200 to 2400[a]

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
12/24/01	7093-18-0088	Park Row	1256	Air	<7.0	<0.002	0	0	<16.00	<0.0049
12/24/01	7093-19-0088	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/24/01	7093-20-	Coast Guard	NS	NS	NS	NS	NS	NS	NS	NS
12/24/01	7093-15-0086	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/24/01	7094-09-0077	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/24/01	7096-12-0082	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/23/01	7095-98-0082[a]	Brooklyn PS #274	1208	Air	<7.0	<0.002	0	0	<16.00	<0.0051
12/23/01	7097-18-0079[a]	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

[a] - Sample 7095-98-0082 (Brooklyn PS #274) was collected 12/23/01 1200 to 2204
Sample 7097-18-0079 (Staten Island PS #44) was collected 12/23/01 1200 to 2400

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-24-01pm.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 20, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	64	16:00:00	10	00:15:00	100	0.0	0.0	30.2	808.6
2	-74.198262	40.566883	2295	1	0	00:00:00	10	00:15:00	100	0.0	0	0	0
3	-74.198685	40.570054	2011	1	0	00:00:00	10	00:15:00	100	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2083	1	17	4:15:00	10	00:15:00	0	0.0	0.0	12.3	86.6

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 27, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	42	10:30:00	10	00:15:00	100	0.0	0.0	122.4	3274.2
2	-74.198262	40.566883	2295	1	43	10:45:00	10	00:15:00	100	0.0	0.0	41	1459.5
3	-74.198685	40.570054	2011	1	42	10:30:00	10	00:15:00	100	0.0	0.0	40.6	732.9
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 28, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	45	11:15:00	10	00:15:00	100	0.0	8.8	35.1	616.5
2	-74.198262	40.566883	2295	1	45	11:15:00	10	00:15:00	100	0.0	0.1	40.2	1015.6
3	-74.198685	40.570054	2011	1	45	11:15:00	10	00:15:00	100	0.0	0.0	40.8	615.8
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 29, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	45	11:15:00	10	00:15:00	100	0.0	15.9	37.9	280.4
2	-74.198262	40.566883	2295	1	45	11:15:00	10	00:15:00	100	0.0	5.1	26.2	990.6
3	-74.198685	40.570054	2011	1	45	11:15:00	10	00:15:00	100	0.0	5.0	24.5	234.0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 30, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	45	11:15:00	10	00:15:00	100	0.0	20.5	244.8	2355
2	-74.198262	40.566883	2295	1	45	11:15:00	10	00:15:00	100	0.0	0.0	36.4	3032.7
3	-74.198685	40.570054	2011	1	32	8:00:00	10	00:15:00	100	0.0	0.0	23.8	615
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/25/01

File Name	NYC569	NYC570	NYC571	NYC572	NYC574	NYC575
Sample Location	Instrument Blank	Tediar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07264	A07267	A07265	A07266
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	50 mL	100 mL
Reporting Limit (RL)	20	20	20	20	100	50
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	**1700**	**330**
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**910**	**280**
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	**320**	**34**	RL	**230**
Acetone	RL	RL	**360**	**140**	**3200**	**4100**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**98**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**110**	**57**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	**26**	**660**	**290**
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	**290**	**70**
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**3700**	**390**
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	**40**	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	**110**
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**1400**	**260**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**1300**	**130**
m&p-Xylenes	RL	RL	RL	RL	**190**	**130**
0-Xylene	RL	RL	RL	RL	RL	**53**
Styrene	RL	RL	RL	RL	**320**	**200**
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/25/01

File Name	NYC569	NYC570	NYC571	NYC572	NYC574	NYC575
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07264	A07267	A07265	A07266
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	50 mL	100 mL
Reporting Limit (RL)	20	20	20	20	100	50
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**1700**	**330**
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**910**	**280**
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	**320**	**34**	RL	**230**
Acetone	RL	RL	**360**	**140**	**3200**	**4100**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**98**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**110**	**57**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	**26**	**660**	**290**
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	**290**	**70**
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**3700**	**390**
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	**40**	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	**110**
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**1400**	**260**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**1300**	**130**
m&p-Xylenes	RL	RL	RL	RL	**190**	**130**
0-Xylene	RL	RL	RL	RL	RL	**53**
Styrene	RL	RL	RL	RL	**320**	**200**
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/28/01

File Name	NYC598	NYC599	NYC600	NYC601	NYC602	NYC603
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07276	A07277	A07278	A07279
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	100 mL
Reporting Limit (RL)	20	20	20	20	50	50
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	**260**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**320**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	**33**	RL	RL	RL
Acetone	RL	RL	**76**	RL	**120**	**62**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**200**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**260**	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	**93**	**22**	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**95**	**100**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**140**	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/29/01

File Name	NYC607	NYC608	NYC609	NYC610	NYC612	NYC611
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07280	A07281	A07282	A07283
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	250mL
Reporting Limit (RL)	20	20	20	20	50	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	**520**	**46**
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**140**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	**220**	**46**	RL	**60**
Acetone	RL	RL	RL	**290**	**530**	**1400**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	**57**	**120**	**150**
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	**25**	**55**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**650**	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	**39**	RL	**32**
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	**23**
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**300**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**380**	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	**120**	**28**
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/30/01

File Name	NYC617	NYC618	NYC620	NYC624	NYC621	NYC623
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07284	A07285	A07286	A07287
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	250mL
Reporting Limit (RL)	20	20	20	20	50	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**150**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	**21**
Dichlorodifluoromethane	RL	RL	RL	RL	RL	**58**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**90**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	**40**
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	**31**	**430**	**65**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**330**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	**21**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**51**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**190**	RL
Heptane	RL	RL	RL	RL	RL	**63**
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	**130**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	**39**
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	**32**
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: D. Adams

U.S. EPA: Norrell

Date: 12/30/01

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2643	2647	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0814	0815	0835			
Stop Time	1444	1450	1453			
Run Time (Minutes)	390	395	378			
Minimum Concentration (ug/m3)	1.2	0.1	0.1			
Maximum Concentration (ug/m3)	53.2	139.4	82.8			
Average Concentration (TWA) (ug/m3)	19.1	14.5	13.7			

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/29/01 (Early) RST: D. Adams team

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
R	0814	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
L	0815	ND	ND	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
M1	0828	0.1	0.1	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
N	0837	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
J	0844	0.2	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
O	0848	ND	ND	ND	21.0	6	ND	ND	ND	ND	ND	ND	ND
F	0852	1.1	ND	ND	21.0	3	ND	ND	ND	ND	ND	ND	ND
A	0904	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
C	0908	1.8	0.9	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
B	0913	1.0	0.6	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
H	0922	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
I	0928	ND	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
D	0936	0.9	0.3	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
K	0945	2.5	0.9	ND	21.0	2	ND	ND	ND	ND	ND	ND	ND
U	0953	ND	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
V	1001	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
S	1016	ND	0.3	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
P	1021	1.4	0.5	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
E	1031	6.2	2.2	ND	21.1	14	ND	ND	ND	ND	ND	ND	ND

Location A: Barkley and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/29/01 (Late) RST: D. Adams Team

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1220	NO	NO	NO	21.1	1	NO	NO	NO	NO	NO	NO	NO
M1	1225	0.8	0.3	NO	21.0	1	NO	NO	NO	NO	NO	NO	NO
N	1231	NO	NO	NO	21.0	3	NO	NO	NO	NO	NO	NO	NO
J	1235	NO	NO	NO	20.9	NO	NO	NO	NO	NO	NO	NO	NO
Q	1238	NO	NO	NO	20.9	NO	NO	NO	NO	NO	NO	NO	NO
F	1240	1.0	1.2	NO	21.0	2	NO	NO	NO	NO	NO	NO	NO
A	1248	1.2	0.7	NO	21.0	1	NO	NO	NO	NO	NO	NO	NO
C	1254	1.1	0.7	NO	21.0	NO	NO	NO	NO	NO	NO	NO	NO
B	1257	0.4	NO	NO	21.0	NO	NO	NO	NO	NO	NO	NO	NO
H	1310	NO	NO	NO	21.1	NO	NO	NO	NO	NO	NO	NO	NO
I	1314	3.1	1.4	NO	21.1	3	NO	NO	NO	NO	NO	NO	NO
D	1320	0.6	0.2	NO	21.1	NO	NO	NO	NO	NO	NO	NO	NO
K	1326	0.3	NO	NO	21.1	NO	NO	NO	NO	NO	NO	NO	NO
U	1333	NO	NO	NO	21.0	1	NO	NO	NO	NO	NO	NO	NO
S	1349	NO	NO	NO	21.1	NO	NO	NO	NO	NO	NO	NO	NO
P	1353	0.5	0.2	NO	21.0	1	NO	NO	NO	NO	NO	NO	NO
E	1400	NO	NO	NO	21.0	NO	NO	NO	NO	NO	NO	NO	NO
							~~NO~~	~~NO~~	~~NO~~	~~NO~~	~~NO~~	~~NO~~	~~NO~~
							~~NO~~	~~NO~~	~~NO~~	~~NO~~	~~NO~~	~~NO~~	~~NO~~

Location A: Barkley and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/30/01 (Early) RST: D. Adams Team

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
R	0809	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
L	0815	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
M1	0825	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
N	0832	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
J	0841	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND
Q	0846	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
F	0851	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
A	0901	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
C	0910	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
B	0915	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
H	0925	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
I	0930	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND
D	0942	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
K	0945	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
U	0955	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
V	1000	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND
S	1015	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND
P	1020	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND
E	1028	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND

* - Multi-RAE Malfunction/Low Battery

Location A: Berkley and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/30/01 (Late) RST: D. Adams team

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1225	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
M1	1229	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
N	1233	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND
J	1238	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND
Q	1243	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
F	1246	ND	*	*	21.1	*	*	ND	ND	ND	ND	ND	ND
A	1250	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
C	1254	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
B	1259	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
H	1311	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
I	1315	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
D	1320	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	ND
K	1330	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	ND
U	1338	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	*
V	1344	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	*
S	1350	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	*
P	1352	ND	*	*	20.9	*	*	ND	ND	ND	ND	ND	*
E	1358	ND	*	*	21.0	*	*	ND	ND	ND	ND	ND	*

* - Equipment Malfunction/Low Battery (cold)

Location A: Barkley and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West.
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

Page 1 of 1

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Syvarsh

U.S. EPA: Norrell

Date: 12/28/01

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2643	2646	2647			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0752	0755	0818			
Stop Time	1410	1413	1427			
Run Time (Minutes)	377	377	366			
Minimum Concentration (ug/m3)	1.9	15.1	8.4			
Maximum Concentration (ug/m3)	88.9	554.3	100			
Average Concentration (TWA) (ug/m3)	23.9	41.6	20.3			

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: D. Adams

U.S. EPA: Norrell

Date: 12/29/01

RST Site Project Manager: Brennan

Location	R	L	N	?	?	?
DataRAM ID No.	2647	2643	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0814	0815	0835			
Stop Time	1422	1426	1434			
Run Time (Minutes)	368	371	359			
Minimum Concentration (ug/m3)	9.6	18.8	14.2			
Maximum Concentration (ug/m3)	99.9	174.3	131.2			
Average Concentration (TWA) (ug/m3)	23.2	35.4	23.7			

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/28/01 (Early) RST: J. Brennen team

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0755	0.5	0.1	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
M1	0815	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
N	0822	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
J	0835	0.1	0.1	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
Q	0837	ND	ND	0.5	21.2	ND	ND	ND	ND	ND	ND	ND	ND
E	0845	0.6	0.1	0.9	21.2	ND	ND	ND	ND	ND	ND	ND	ND
A	0847	0.6	0.1	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
C	0858	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
B	0905	0.1	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
H	0918	0.1	0.3	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
I	0929	ND	ND	0.5	21.2	ND	ND	ND	ND	ND	ND	ND	ND
D	0938	0.1	0.2	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
K	0945	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
T	0955	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
U	1000	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
V	1001	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
S	1020	ND	0.4	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
P	1025	ND	0.6	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
F	1028	0.1	0.8	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/28/01 (Late) RST: J. Brennan team

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1222	0.1	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
M1	1225	ND	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
N	1228	0.6	0.1	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
U	1232	0.7	0.1	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
Q	1235	0.5	0.1	ND	21.2	6	ND	ND	ND	ND	ND	ND	ND
F	1240	ND	0.1	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
A	1244	0.5	0.2	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
C	1247	0.6	0.1	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
B	1249	0.4	0.1	ND	21.2	6	ND	ND	ND	ND	ND	ND	ND
H	1305	0.7	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
I	1310	1.0	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
D	1319	0.8	0.8	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
K	1325	1.0	0.5	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
T	1330	1.0	0.1	ND	21.2	1	ND	ND	ND	ND	ND	ND	* ND
U	1334	1.1	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	* ND
V	1337	1.1	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	* ND
S	1345	0.8	0.1	ND	21.2	ND	ND	ND	ND	ND	ND	ND	* ND
P	1348	1.1	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	* ND
E	1354	0.9	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	* ND

*- Battery Malfunction

Location A: Barclay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday - Wednesday, January 1 - 2, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 3:00 p.m. on 1/2

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted on December 29 and 30 at Pace University, Borough of Manhattan Community College, the Coast Guard building in Battery Park and on Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM10 - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted on December 29 and 30 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Particulate Monitoring - EPA used portable monitors to collect samples on December 31 and January 1 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on December 31 and January 1 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day. Benzene exceeded the OSHA standard on December 31 at the North Tower debris pile. There were no exceedances for benzene on January 1. All six samples taken at EPA's Wash Tent (West St. and Murray), Austin Tobin Plaza and the South Tower debris pile on both days showed no detectable levels of benzene.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds from December 31 and January 1. No significant readings were found.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, January 2, 2002

Ambient Air Sampling Locations

NYC / ER (Dec 29) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***13.78 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.37 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.35 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).
Note: Monitoring at the Coast Guard Station has ended.

NYC / ER (Dec 29) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***18.69 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 30) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.29 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***8.74 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***8.87 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 30) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***15.52 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 31) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 to 6½ hours.
Station L values ranged from 4.4 to 2555.1 ug/m³ with an average of 30.1 ug/m³.
Station N values ranged from 8.0 to 125.8 ug/m³ with an average of 21.3 ug/m³.
Station R values ranged from 10.9 to 84.0 ug/m³ with an average of 25.4 ug/m³.

NYC / ER (January 1, 2002) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 to 6½ hours.
Station L values ranged from 0.1 to 96.0 ug/m³ with an average of 16.3 ug/m³.
Station N values ranged from 8.1 to 38.0 ug/m³ with an average of 15.4 ug/m³.
Station R values ranged from 0.3 to 89.6 ug/m³ with an average of 16.8 ug/m³.

NYC / ER (Dec 31) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
Benzene concentration noted at North Tower debris area at ground level was 14 ppm.
All 3 of the other samples (Washing Tent, Austin Tobin Plaza, and South Tower) did not note any benzene above the detection limit (20 ppbv).

NYC / ER (Jan 1, 2002) Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
All 3 of the other samples (Location R, Austin Tobin Plaza, and South Tower) did not note any benzene above the detection limit (20 ppbv).

Direct Reading Instruments

NYC / ER (Dec 31)

Nothing of significance reported.

NYC / ER (Jan 1, 2002)

Nothing of significance reported.

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/31/01

File Name	NYC627	NYC628	NYC629	NYC630	NYC634	NYC631
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower Plume	South Tower Plume
Sample Number			A07288	A07291	A07289	A07290
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	20 mL	250mL
Reporting Limit (RL)	20	20	20	20	250	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**10000**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**840**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	**24**
Acetone	RL	RL	RL	RL	**13000**	**380**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**500**	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**2900**	**44**
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	**890**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**14000**	RL
Heptane	RL	RL	RL	RL	**420**	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	**260**	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**7700**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**7000**	RL
m&p-Xylenes	RL	RL	RL	RL	**1000**	RL
o-Xylene	RL	RL	RL	RL	**510**	RL
Styrene	RL	RL	RL	RL	**1100**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	**570**	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/01/02

File Name	NYC638	NYC639	NYC646	NYC641	NYC645	NYC642
Sample Location	Instrument Blank	Tedlar Bag Blank	Location R	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07296	A07293	A07294	A07295
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	250mL
Reporting Limit (RL)	20	20	20	20	50	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	**190**	**21**
Chlorodifuoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**190**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	**44**
Acetone	RL	RL	**24**	**83**	**750**	**1300**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**120**	**130**
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	**55**
Benzene	RL	RL	RL	RL	**430**	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**94**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**91**	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	**27**
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler:

U.S. EPA: Norrell

Date: 12/3/01

RST Site Project Manager: Brennan

Location	R	~~2643~~	N			
DataRAM ID No.	2043	2047	2046			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0804	0807	0829			
Stop Time	1426	1432	1432			
Run Time (Minutes)	378	386	363			
Minimum Concentration (ug/m3)	10.9	4.4	8.0 ~~21.3~~			
Maximum Concentration (ug/m3)	84.0	2555.1	125.8			
Average Concentration (TWA) (ug/m3)	25.4	30.1	21.3			

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: [illegible]

Date: 1/1/02

U.S. EPA: Norrell

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2647	2646	2643			
Flow Rate (Liters / Minute)	[illegible]	2.2	2.5			
Start Time	0755	0800	0821			
Stop Time	1424	1426	1428			
Run Time (Minutes)	386	386	367			
Minimum Concentration (ug/m3)	0.3	0.1	8.1			
Maximum Concentration (ug/m3)	84.6	96.0	32.0			
Average Concentration (TWA) (ug/m3)	16.8	16.3	15.4			

Early

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/31/01 RST: T. Kish

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
R	0804	*	*	*	21.0	*	*	0.0	0.0	0.0	0.0	0.0	0.0
L	0807	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0
M1	0820	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0
N	0829	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0
J	0837	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0
O	0844	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0
F	0852	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0
A	0901	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
C	0913	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
B	0918	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
H	0927	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
I	0934	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
D	0944	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
K	0951	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
U	0959	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
V	1006	*	*	*	21.2	*	*	0.0	0.0	0.0	0.0	0.0	0.0
S	1015	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0
P	1022	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0
E	1029	*	*	*	21.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0

* FID, PID not functioning properly

Location A: Barkley and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Late

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 12/31/01 RST: T. Kish

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1227	*	0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M1	1230	*	0.0	0.0	20.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1232	*	0.0	0.0	20.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T	1235	*	0.0	0.0	20.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q	1240	*	0.0	0.0	20.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F	1244	*	0.0	0.0	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
A	1252	*	0.2	0.0	20.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
C	1256	*	0.0	0.0	20.4	2.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
G	1301	*	0.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
H	1311	*	0.0	0.0	20.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
I	1314	*	0.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
D	1330	*	0.0	0.0	20.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
K	1336	*	0.0	0.0	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
U	1340	*	0.1	0.0	20.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
V	1346	*	0.0	0.0	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
S	1351	*	0.1	0.0	20.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
P	1356	*	0.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ
E	1401	*	0.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Δ

* FID OUT FUNCTIONING PROPERLY
Δ BATTERY DIED ON PHOSPHINE METER 1204

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 11/22 (EARLY) RST: [illegible]

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
~~E~~	[illegible]		~~ND~~		~~20.7~~								
L	0800	N/A	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
M1	0815	N/A	ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	ND
N	0821	N/A	ND	ND	20.2	ND	ND	ND	ND	ND	ND	ND	ND
J	0842	N/A	ND	ND	20.1	1	ND	ND	ND	ND	ND	ND	ND
Q	0848	N/A	ND	ND	20.1	5	ND	ND	ND	ND	ND	ND	ND
F	0859	N/A	0.1	ND	20.1	2	ND	ND	ND	ND	ND	ND	ND
G	0910	N/A	0.1	ND	20.1	1	ND	ND	ND	ND	ND	ND	ND
C	0916	N/A	ND	ND	20.1	1	ND	ND	ND	ND	ND	ND	ND
B	0923	N/A	ND	ND	20.1	ND	ND	ND	ND	ND	ND	ND	ND
H	0942	N/A	ND	ND	20.1	1	ND	ND	ND	ND	ND	ND	ND
I	0956	N/A	ND	ND	20.1	ND	ND	ND	ND	ND	ND	ND	ND
D	0956	N/A	ND	ND	20.1	1	ND	ND	ND	ND	ND	ND	ND
K	1005	N/A	0.1	ND	20.2	ND	ND	ND	ND	ND	ND	ND	ND
T	1017	N/A	0.1	ND	20.2	ND	ND	ND	ND	ND	ND	ND	ND
U	1021	N/A	0.1	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND
V	1032	N/A	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
S	1042	N/A	ND	ND	20.5	1	ND	ND	ND	ND	ND	ND	ND
P	1047	N/A	ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	ND
E	1054	N/A	ND	ND	20.5	1	ND	ND	ND	ND	ND	ND	ND

NOTE: PID READS ~~NOT LIGHT~~ CO(E), HF, HCl — SOA

Location A: Barkley and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, January 3, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 3:00 p.m. on 1/3

Air: Fixed Monitors in New York:
Asbestos - EPA analyzed 41 samples taken in and around ground zero on December 24 and 25. In addition, EPA sampled for asbestos at two lower Manhattan locations from December 25 through 28. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,074, with 29 samples above the standard (27 of these were collected prior to September 30, one was collected on October 9 and the other on November 27).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Public School 154 (33 East 135th St., Bronx), Intermediate School 143 (511 W. 182nd St., Manhattan), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) from December 25 through 28. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Particulates) - EPA used portable monitors to collect samples of particulates on December 31 at the Staten Island Landfill. One station of three continued to show increased readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 2 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 2 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels

at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day. Benzene exceeded the OSHA standard at the North Tower debris pile. All other three samples taken at EPA's Wash Tent (West St. and Murray), Austin Tobin Plaza and the South Tower debris pile showed no detectable levels of benzene.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 2. No significant readings were found.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, January 3, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Dec 24, 1200 - 2359 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
Location E was not sampled.
Note: Low sample volume recorded.

NYC / ER (Dec 25, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Dec 31) - Particulate Monitoring (Dataram)

Continued increased readings noted at one (P-1) of three stations (P-1, P-2, and P-3) based on daily average concentrations.
Note: There was no site work on January 1.

Ambient Air Sampling Locations

NYC / ER (Dec 25 - 28) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 28 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
Note: Monitoring at the Coast Guard station (Site 3) has ended.

NYC / ER (January 2) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 to 6½ hours.
Station L values ranged from 6.0 to 66.2 ug/m^3 with an average of 15.7 ug/m^3.
Station N values ranged from 4.4 to 36.4 ug/m^3 with an average of 12.1 ug/m^3.
Station R values ranged from 0.0 to 70.2 ug/m^3 with an average of 15.5 ug/m^3.

NYC / ER (Jan 2) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
All 3 of the other samples (Washing Tent, Austin Tobin Plaza, and South Tower) did not note any benzene above the detection limit (20 ppbv).

Direct Reading Instruments

NYC / ER (Jan 2)

Nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/24/01 1200 to 2359

Data Validation Date: 12/31/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/24/01	RST-02357	L	668	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/24/01	RST-02358	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02359	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02360	J	204	Air	<7.0	<0.013	0	0	<8.00	<0.0151
12/24/01	RST-02362[a]	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02363	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02364	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02365	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02366	C	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/24/01	RST-02367	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02368	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02369	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02370	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02371	U	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/24/01	RST-02372	U-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02373	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02374	V-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02375	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/24/01	RST-02376	P	484	Air	<7.0	<0.006	0	0	<8.00	<0.0064
12/24/01	-	E	NS	NS	NS	NS	NS	NS	NS	NS
12/24/01	RST-02377	W	720	Air	<7.0	<0.004	3***	2***	44.44	0.0238
12/25/01	FB122501	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
12/25/01	TB122501	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
[a] - Sample No. RST-02361 was not used at this time

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-24-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/25/01 0001 to 1200

Data Validation Date: 12/31/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
12/25/01	RST-02378	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02379	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02380	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02361[a]	J	422	Air	<7.0	<0.006	0	0	<8.00	<0.0073
12/25/01	RST-02381	Q	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/25/01	RST-02382	F	690	Air	<7.0	<0.004	4***	1***	40.00	0.0223
12/25/01	RST-02383	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02384	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02385	C	709	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02386	H	670	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/25/01	RST-02387	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02388	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02389	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02390	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02391	V	684	Air	<7.0	<0.004	0	0	<8.00	<0.0045
12/25/01	RST-02392	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02393	S-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02394	P	408	Air	<7.0	<0.007	0	0	<8.00	<0.0075
12/25/01	RST-02395	P-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02396	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/25/01	RST-02397	W	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/25/01	FB122501	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
12/25/01	TB122501	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
[a] - Sample Number out of sequence

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-25-01-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/25/01 1200 to 2400

Data Validation Date: 01/01/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/25/01	7093-18-0089	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/25/01	7093-19-0089	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/25/01	-	Coast Guard	NS	Air	NS	NS	NS	NS	NS	NS
12/25/01	7093-15-0087	Manhattan IS #143	1406	Air	<7.0	<0.002	0	0	<16.00	<0.0044
12/25/01	7094-09-0078	Bronx PS #154	1196***	Air	<7.0	<0.002	0	0	<13.33	<0.0043
12/25/01	7096-12-0083	Queens PS #199	1078***	Air	<7.0	<0.002	0	0	<13.33	<0.0048
12/25/01	7095-98-0083	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/25/01	7097-18-0080	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-25-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/26/01 1200 to 2400

Data Validation Date: 12/31/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
12/26/01	7093-18-0090	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/26/01	7093-19-0090	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/26/01	-	Coast Guard	NS	Air	NS	NS	NS	NS	NS	NS
12/26/01	7093-15-0088	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/26/01	7094-09-0079	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/26/01	7096-12-0084	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/26/01	7095-98-0084	Brooklyn PS #274	1076***	Air	<7.0	<0.003	0	0	<13.33	<0.0048
12/26/01	7097-18-0081	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-26-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/27/01 1200 to 2400

Data Validation Date: 12/31/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/27/01	7093-18-0091	Park Row	1338	Air	<7.0	<0.002	1****	0	16	0.0046
12/27/01	7093-19-0091	Chambers Street	1144***	Air	<7.0	<0.002	0	0	<13.33	<0.0045
12/27/01	7093-15-0089	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/27/01	7094-09-0080	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/27/01	7096-12-0085	Queens PS #199	1070***	Air	<7.0	<0.003	0	0	<13.33	<0.0048
12/27/01	7095-98-0085	Brooklyn PS #274	1190***	Air	<7.0	<0.002	0	0	<13.33	<0.0043
12/27/01	7097-18-0082	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-27-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/28/01 1200 to 2400

Data Validation Date: 12/31/2001

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/28/01	7093-18-0092	Park Row	1388	Air	<7.0	<0.002	0	0	<16.00	<0.0044
12/28/01	7093-19-0092	Chambers Street	1376	Air	<7.0	<0.002	0	0	<16.00	<0.0045
12/28/01	7093-15-0090	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/28/01	7094-09-0081	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/28/01	7096-12-0086	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/28/01	7095-98-0086	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/28/01	7097-18-0083	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-28-01pm.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 31, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	18	04:30:00	10	00:15:00	100	0.0	24.6	246.5	2347.0
2	-74.198262	40.566883	2295	1	24	06:00:00	10	00:15:00	100	0.0	6.1	89.2	1988.6
3	-74.198685	40.570054	2011	1	24	06:00:00	10	00:15:00	100	0.0	0.0	39.2	416.1
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/02/02

File Name	NYC649	NYC650	NYC651	NYC652	NYC655	NYC653
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07297	A07298	A07299	A07300
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	250mL
Reporting Limit (RL)	20	20	20	20	50	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**610**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**210**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	**59**	RL
Acetone	RL	RL	RL	RL	**4100**	**31**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**110**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**540**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	**58**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**1200**	RL
Heptane	RL	RL	RL	RL	RL	**25**
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	**130**	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**300**	**46**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**170**	RL
m&p-Xylenes	RL	RL	RL	RL	**79**	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: J. BRENNAN

U.S. EPA: Norrell

Date: 1.2.02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2043	2046	2647			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0821	0824	0844			
Stop Time	1443	1445	1447			
Run Time (Minutes)	06:21:30	06:20:00	06:02:30			
Minimum Concentration (ug/m3)	0.0	6.0	4.4			
Maximum Concentration (ug/m3)	70.2	66.2	36.4			
Average Concentration (TWA) (ug/m3)	15.5	15.7	12.1			

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/2/02 (Evening) RST: J. Brennan team

Location	Time	FID (units)	FID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0830	*	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
M1	0836	*	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
N	0844	*	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
T	0850	*	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
G	0905	*	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
F	0915		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A	0930		ND	ND	ND	7	ND	ND	ND	ND	ND	ND	ND
C	0935		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B	0940		ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND
H	0955		ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND
I	1000		ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND
D	1015		0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
J	1020		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T	1030		ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
U	1035		ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND
V	1040		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S	1050		ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND
P	1055		0.1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND
E	1105	↓	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

* FID would not light

$COCl_2$, HF, HCl - SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/2/02 (AM) RST: BRENNAN

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1235	—	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
M1	1239	—	ND	ND	21.3	ND	ND	ND	ND	ND	ND	1.1	ND
N	1243	—	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
J	1247	—	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
Q	1251	—	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
F	1255	—	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
A	1300	—	ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
C	1306	—	ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
B	1309	—	ND	ND	21.2	6	ND	ND	ND	ND	ND	ND	ND
H	1319	—	ND	ND	21.2	6	ND	ND	ND	ND	ND	ND	ND
E	1324	—	ND	ND	21.2	10	ND	ND	ND	ND	ND	ND	ND
D	1335	—	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
K	1340	—	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
I	1346	—	0.1	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
U	1349	—	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	*
V	1356	—	0.1	ND	21.2	6	ND	ND	ND	ND	ND	ND	
S	1405	—	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	
P	1408	—	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	
R	1413	—	ND	ND	21.2	7	ND	ND	ND	ND	ND	ND	

NOTE: FID WOULD NOT LIGHT

$COCl_2$, HF, HCl – GPM

* BATTERY DEAD

Location A: Barclay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/1/02 - (Rate) RST: Bachman

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1229	N/A	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
M1	1234	N/A	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
N	1237	N/A	ND	ND	20.8	1	ND	ND	ND	ND	ND	ND	ND
J	1244	N/A	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
Q	1246	N/A	ND	ND	20.9	3	ND	ND	ND	ND	ND	ND	ND
F	1250	N/A	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
A	1255	N/A	0.2	ND	20.8	3	ND	ND	ND	ND	ND	ND	ND
C	1300	N/A	ND	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
B	1302	N/A	ND	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
H	1321	N/A	0.2	ND	20.6	3	ND	ND	ND	ND	ND	ND	ND
I	1325	N/A	ND	ND	20.5	1	ND	ND	ND	ND	ND	ND	ND
D	1330	N/A	ND	ND	20.5	3	ND	ND	ND	ND	ND	ND	ND
K	1340	N/A	ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	*
~~*~~	~~1345~~	~~N/A~~	~~0.3~~	~~ND~~	~~20.5~~	~~4~~	~~ND~~	~~ND~~	~~ND~~	~~ND~~	~~ND~~	~~ND~~	~~*~~
T	1345	N/A	0.3	ND	20.5	4	ND	ND	ND	ND	ND	ND	*
U	1347	N/A	ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	*
V	1351	N/A	ND	ND	20.6	1	ND	ND	ND	ND	ND	ND	*
S	1357	N/A	0.1	ND	20.6	3	ND	ND	ND	ND	ND	ND	*
P	1400	N/A	0.1	ND	20.7	1	ND	ND	ND	ND	ND	ND	*
E	1403	N/A	0.1	ND	20.7	ND	ND	ND	ND	ND	ND	ND	*
													*

* Battery DEAD NOTE: FID WOULD NOT LIGHT $COCl_2$, HCl, HF - SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
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Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, January 4, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 6:00 p.m. on 1/4

Air: Fixed Monitors in New York:
Asbestos - EPA analyzed 117 samples taken in and around ground zero from December 26 through 29. All but one sample showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. One sample taken on December 27 showed 204.44 structures per square millimeter. In light of this sample reading, EPA is increasing surveillance of the ground zero work area to ensure all dust suppression measure are taken. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,191, with 30 samples above the standard (27 of these were collected prior to September 30, the other three were collected on October 9, November 27 and December 27).

Staten Island Landfill:
Air (Asbestos) - Thirty-three air samples collected on December 29 and 30 were analyzed for asbestos. All were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 2 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 3 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 2 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day. Benzene did not exceed the OSHA standard in any samples. Samples taken at EPA's Wash Tent (West St. and Murray) and Austin Tobin Plaza showed no

detectable levels of benzene.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 3. No significant readings were found.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, January 4, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Dec 26, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.
Location P was not sampled.

NYC / ER (Dec 27, 0001 - 1200 hrs)

1 of 21 samples analyzed was above the TEM AHERA standard.
Exceedance of TEM AHERA standard occurred at Location D (204.44 S/mm^2).
22 of the 23 structures identified in this sample were less than 5 microns in length.
Note: A field duplicate (co-located) sample for Location D did not detect any structures (< 8.89 S/mm^2).
Location P was not sampled.

NYC / ER (Dec 27, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Dec 28, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Dec 28, 1200 - 2359 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
2 locations (Locations T and T-duplicate) were not sampled since access to those locations was not available.

NYC / ER (Dec 29, 0001 - 1200 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
1 sample (Location T) was not submitted at this time since access to that location was not available.
1 sample (Location V) was not collected due to equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Dec 29, 0815 - 2136 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 location (Location O-18) was not sampled since access to that location was not available.

Fresh Kills (Dec 30, 0746 - 2132 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
4 samples (Locations P-1, W-12A, W-12B, and B-14) were not analyzed due to overloading of particulates.
Note: Low sample volume recorded.

Fresh Kills (Jan 2) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-3, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (January 3) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 to 7 hours.
Station L values ranged from 0.0 to 172.5 ug/m^3 with an average of 19.5 ug/m^3.
Station N values ranged from 7.8 to 100.0 ug/m^3 with an average of 15.6 ug/m^3.
Station R values ranged from 7.6 to 132.5 ug/m^3 with an average of 18.4 ug/m^3.

NYC / ER (Jan 3) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 2 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza), including in the debris area at ground level.

Direct Reading Instruments

NYC / ER (Jan 3)

Nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/26/01 1200 to 2359

Data Validation Date: 01/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/26/01	RST-02443	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02444	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02445	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02446	J	720	Air	9.55	0.005	0	0	<8.89	<0.0048
12/26/01	RST-02447	Q	720	Air	11.46	0.006	0	0	<8.89	<0.0048
12/26/01	RST-02448	F	720	Air	10.83	0.006	0	0	<8.89	<0.0048
12/26/01	RST-02449	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02450	C	673	Air	15.29	0.009	0	0	<8.00	<0.0046
12/26/01	RST-02451	C-Duplicate	720	Air	12.10	0.006	2***	0	17.78	0.0095
12/26/01	RST-02452	B	720	Air	8.92	0.005	0	0	<8.89	<0.0048
12/26/01	RST-02453	H	720	Air	8.28	0.004	0	0	<8.89	<0.0048
12/26/01	RST-02454	H-Duplicate	720	Air	10.19	0.005	1***	0	8.89	0.0048
12/26/01	RST-02455	I	720	Air	12.74	0.007	0	0	<8.89	<0.0048
12/26/01	RST-02456	I-Duplicate	720	Air	7.64	0.004	0	0	<8.89	<0.0048
12/26/01	RST-02457	D	720	Air	14.65	0.008	1***	0	8.89	0.0048
12/26/01	RST-02458	K	720	Air	8.92	0.005	1***	0	8.89	0.0048
12/26/01	RST-02459	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02460	U	720	Air	9.55	0.005	0	0	<8.89	<0.0048
12/26/01	RST-02461	V	720	Air	10.19	0.005	0	0	<8.89	<0.0048
12/26/01	RST-02462	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	-	P	NS	NS	NS	NS	NS	NS	NS	NS
12/26/01	RST-02463	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02464	W	720	Air	28.66	0.015	0	0	<8.89	<0.0048
12/27/01	FB122701	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/27/01	TB122701	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
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E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
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Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
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*** Chrysotile
**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-26-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/27/01 0001 to 1200

Data Validation Date: 01/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/27/01	RST-02465	L	597	Air	<7.0	<0.005	0	0	<8.00	<0.0052
12/27/01	RST-02466	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02467	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02468	J	720	Air	10.83	0.006	0	0	<8.89	<0.0048
12/27/01	RST-02469	Q	701	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/27/01	RST-02470	F	720	Air	7.64	0.004	2***	0	17.78	0.0095
12/27/01	RST-02471	A	716	Air	9.55	0.005	0	1***	8.89	0.0048
12/27/01	RST-02472	C	720	Air	14.01	0.007	1***	0	8.89	0.0048
12/27/01	RST-02473	B	720	Air	8.92	0.005	2***	0	17.78	0.0095
12/27/01	RST-02474	B-Duplicate	700	Air	<7.0	<0.004	1***	0	8.89	0.0049
12/27/01	RST-02475	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02476	I	693	Air	10.19	0.006	0	0	<8.89	<0.0049
12/27/01	RST-02477	D	720	Air	<7.0	<0.004	22***	1***	204.44	0.1093
12/27/01	RST-02478	D-Duplicate	711	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02479	K	694	Air	7.64	0.004	0	0	<8.89	<0.0049
12/27/01	RST-02480	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02481	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02482	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02483	S	720	Air	8.28	0.004	0	0	<8.89	<0.0048
12/27/01	-	P	NS	NS	NS	NS	NS	NS	NS	NS
12/27/01	RST-02484	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02485	W	670	Air	8.92	0.005	0	0	<8.00	<0.0046
12/27/01	FB122701	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/27/01	TB122701	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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FL-12-27-01-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/27/01 1200 to 2359

Data Validation Date: 12/31/01

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/27/01	RST-02486	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02487	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02488	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02489	J	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/27/01	RST-02490	J-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02491	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02492	F	720	Air	<7.0	<0.004	1***	1***	17.78	0.0095
12/27/01	RST-02493	A	720	Air	10.19	0.005	0	0	<8.89	<0.0048
12/27/01	RST-02494	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02495	C-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02496	B	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/27/01	RST-02497	H	707	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02498	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02499	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02500	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02501	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02502	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02503	V	702	Air	<7.0	<0.004	2***	1***	26.67	0.0146
12/27/01	RST-02504	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02505	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02506	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/27/01	RST-02507	W	658	Air	11.46	0.007	0	0	<8.00	<0.0047
12/28/01	FB122801	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/28/01	TB122801	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-27-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/28/01 0001 to 1200

Data Validation Date: 01/02/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/28/01	RST-02508	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02509	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02510	N	590	Air	<7.0	<0.005	0	0	<8.00	<0.0052
12/28/01	RST-02511	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02512	Q	645	Air	7.64	0.005	1***	0	8.00	0.0048
12/28/01	RST-02513	F	306	Air	<7.0	<0.009	0	0	<8.00	<0.0101
12/28/01	RST-02514	A	644	Air	9.55	0.006	0	0	<8.00	<0.0048
12/28/01	RST-02515	A-Duplicate	720	Air	15.29	0.008	0	0	<8.89	<0.0048
12/28/01	RST-02516	C	720	Air	11.46	0.006	1***	0	8.89	0.0048
12/28/01	RST-02517	B	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/28/01	RST-02518	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02519	I	641	Air	10.19	0.006	0	0	<8.00	<0.0048
12/28/01	RST-02520	D	426	Air	<7.0	<0.006	0	0	<8.00	<0.0072
12/28/01	RST-02521	K	669	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/28/01	RST-02522	K-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02523	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02524	U	697	Air	<7.0	<0.004	0	0	<8.00	<0.0044
12/28/01	RST-02525	V	692	Air	7.64	0.004	0	0	<8.00	<0.0045
12/28/01	RST-02526	S	653	Air	<7.0	<0.004	0	0	<8.00	<0.0047
12/28/01	RST-02527	P	650	Air	<7.0	<0.004	0	0	<8.00	<0.0047
12/28/01	RST-02528	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02529	W	575	Air	8.28	0.0055	0	0	<8.00	<0.0054
12/28/01	FB122801	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/28/01	TB122801	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Key:
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-28-01-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/28/01 1200 to 2359

Data Validation Date: 01/03/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/28/01	RST-02530	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02531	M1	720	Air	<7.0	<0.004	0	1***	8.89	0.0048
12/28/01	RST-02532	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02533	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02534	Q	720	Air	7.01	0.004	0	0	<8.89	<0.0048
12/28/01	RST-02535	F	720	Air	<7.0	<0.004	2***	0	17.78	0.0095
12/28/01	RST-02536	A	720	Air	13.38	0.007	0	0	<8.89	<0.0048
12/28/01	RST-02537	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02538	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02539	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02540	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02541	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02542	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	-	T	NS	NS	NS	NS	NS	NS	NS	NS
12/28/01		T-Duplicate	NS	NS	NS	NS	NS	NS	NS	NS
12/28/01	RST-02543	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02544	U-Duplicate	706	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02545	V	654	Air	<7.0	<0.004	0	0	<8.00	<0.0047
12/28/01	RST-02546	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02547	P	651	Air	<7.0	<0.004	0	0	<8.00	<0.0047
12/28/01	RST-02548	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/28/01	RST-02549	W	720	Air	7.01	0.004	3***	0	26.67	0.0143
12/29/01	FB122901	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/29/01	TB122901	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-28-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/29/01 0001 to 1200

Data Validation Date: 01/03/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/29/01	RST-02550	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02551	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02552	N	712	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02553	J	692	Air	<7.0	<0.004	1***	0	8.00	0.0045
12/29/01	RST-02554	Q	716	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02555	F	667	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/29/01	RST-02556	A	679	Air	11.46	0.0065	0	0	<8.00	<0.0045
12/29/01	RST-02557	C	720	Air	7.64	0.004	1***	0	8.89	0.0048
12/29/01	RST-02558	B	696	Air	<7.0	<0.004	1***	1***	16.00	0.0089
12/29/01	RST-02559	H	714	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02560	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02561	D	672	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/29/01	RST-02562	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	-	T	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)
12/29/01	RST-02563	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	-	V	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)
12/29/01	RST-02564	V-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02565	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02566	S-Duplicate	703	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/29/01	RST-02567	P	637	Air	<7.0	<0.004	0	0	<8.00	<0.0048
12/29/01	RST-02568	E	668	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/29/01	RST-02569	W	439	Air	<7.0	<0.006	1***	0	8.00	0.0070
12/29/01	FB122901	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/29/01	TB122901	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS(1) - Sample not submitted at this time due to no access to station location
NS(2) - Sample not submitted due to no sample volume

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-12-29-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/29/01 0815 to 2136

Data Validation Date: 1/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/29/01	LF01856	P-1	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
12/29/01	LF01857	P-2	555	Air	<7.0	<0.005	0	0	<7.87	<0.0055
12/29/01	LF01858	P-3	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
12/29/01	LF01859	P-4	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
12/29/01	LF01860	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/29/01	LF01861	P-6	565	Air	<7.0	<0.005	0	0	<7.87	<0.0054
12/29/01	LF01862	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/29/01	LF01863	P-8	720	Air	17.83	0.010	0	0	<8.75	<0.0047
12/29/01	LF01864	W-11	720	Air	20.38	0.011	3***	0	26.25	0.0140
12/29/01	LF01865	W-12A	720	Air	15.29	0.008	0	0	<8.75	<0.0047
12/29/01	LF01866	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/29/01	LF01867	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/29/01	LF01868	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/29/01	LF01869	T-15	720	Air	22.93	0.012	0	0	<8.75	<0.0047
12/29/01	LF01870	T-16	720	Air	10.19	0.005	2***	0	17.50	0.0094
12/29/01	LF01871	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/29/01	LF01872	O-18	NS	NS	NS	NS	NS	NS	NS	NS
12/29/01	LF01873	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/29/01	LF01874	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/29/01	LF01875	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/29/01	LF01876	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted to the laboratory at this time due to no access to sample location

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-29-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/30/01 0746 to 2132

Data Validation Date: 01/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
12/30/01	LF01877	P-1	699	Air	<7.0	<0.004	NA [1]	NA [1]	NA [1]	NA [1]
12/30/01	LF01878	P-2	89 [a]	Air	<7.0	<0.030	0	0	<7.87	<0.0341
12/30/01	LF01879	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/30/01	LF01880	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/30/01	LF01881	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/30/01	LF01882	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/30/01	LF01883	P-7	704	Air	<7.0	<0.004	0	0	<8.75	<0.0048
12/30/01	LF01884	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/30/01	LF01885	W-11	720	Air	20.38	0.011	1***	1****	17.50	0.0094
12/30/01	LF01886	W-12A	720	Air	NA [1]	NA [1]	NA [1]	NA [1]	NA [1]	NA [1]
12/30/01	LF01887	W-12B	720	Air	<7.0	<0.004	NA [1]	NA [1]	NA [1]	NA [1]
12/30/01	LF01888	B-13	694	Air	NA [1]	NA [1]	1***	0	8.75	0.0049
12/30/01	LF01889	B-14	720	Air	10.19	0.005	NA [1]	NA [1]	NA [1]	NA [1]
12/30/01	LF01890	T-15	720	Air	7.64	0.004	2***	0	17.50	0.0094
12/30/01	LF01891	T-16	720	Air	<7.0	<0.004	2***	1***	26.25	0.0140
12/30/01	LF01892	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/30/01	LF01893	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/30/01	LF01894	O-19	360	Air	<7.0	<0.007	0	0	<7.87	<0.0084
12/30/01	LF01895	MPHS-20	678	Air	<7.0	<0.004	1***	0	8.75	0.0050
12/30/01	LF01896	Lot Blank	0	Air	<7.0	n/a	0	0	NA[2]	NA[2]
12/30/01	LF01897	Trip Blank	0	Air	<7.0	n/a	0	0	NA[2]	NA[2]

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
****Amosite
NA [1] - Not analyzed due to overloading of particulates
NA [2] - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted
[a] - Extremely low sample volume collected

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 2, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
3	-74.198685	40.570054	2295	1	45	11:15:00	10	00:15:00	100	0.0	0.0	52.4	3018.7
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	44	11:00:00	10	00:15:00	100	0.0	3.2	15.1	355.4
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	43	10:45:00	10	00:15:00	100	0.0	0.0	59.0	1935.3

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: B. Hoffman

U.S. EPA: Norrell

Date: 1/3/02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2643	2646	2647			
Flow Rate (Liters / Minute)	~~08~~ 2 L/m	2 L/m	2 L/m			
Start Time	0811	0814	0832			
Stop Time	1505	1502	1458			
Run Time (Minutes)	~~414~~ 414	~~408~~ 408	386			
Minimum Concentration (ug/m3)	7.6	0.0	7.8			
Maximum Concentration (ug/m3)	132.5	172.5	100.0			
Average Concentration (TWA) (ug/m3)	18.4	19.5	15.6			

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 9/03/02 RST: D. Hoffman

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0822	*	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
M	0826		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
N	0837		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
T	0842		ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
Q	0847		ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
F	0853		ND	ND	21.1	5	ND	ND	ND	ND	ND	ND	ND
A	0908		ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
B	0913		ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
C	0919		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
H	0928		ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
T	0946		ND	ND	21.3	4	ND	ND	ND	ND	ND	ND	ND
D	0953		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
K	1002		ND	ND	21.3	5	ND	ND	ND	ND	ND	ND	ND
T	1023		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
U	1028		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
V	1034		ND	ND	21.4	ND	ND	ND	ND	ND	ND	ND	ND
S	1043		ND	ND	21.5	6	ND	ND	ND	ND	ND	ND	ND
P	1048		ND	ND	21.5	1	ND	ND	ND	ND	ND	ND	ND
E	1052		ND	ND	21.5	ND	ND	ND	ND	ND	ND	ND	ND

* FID no flame.

Location A: Barclay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 5 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/3/02 RST: B. Hoffman

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1254	*	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
M1	1257		ND	ND	21.3	4	ND	ND	ND	ND	ND	ND	ND
N	1302		ND	ND	21.3	1	ND	ND	ND	ND	ND	ND	ND
J	1313		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
G	1316		ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
F	1320		ND	ND	21.5	ND	ND	ND	ND	ND	ND	ND	ND
A	1324		ND	ND	21.5	10	ND	ND	ND	ND	ND	ND	ND
B	1333		ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
C	1335		ND	ND	21.5	1	ND	ND	ND	ND	ND	ND	ND
H	1351		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	**
I	1359		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	
D	1407		ND	ND	21.7	7	ND	ND	ND	ND	ND	ND	
K	1411		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	
T	1425		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	
U	1427		ND	ND	21.3	1	ND	ND	ND	ND	ND	ND	
V	1429		ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	
S	1436		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	
P	1439		ND	.2	21.8	3	ND	ND	ND	ND	ND	ND	
E	1442		ND	.3	21.9	4	ND	ND	ND	ND	ND	ND	

* FID no flame detected

** $COCl_2$ Single point monitor battery dead

Location A: Barclay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/03/02

File Name	NYC658	NYC659	NYC660	NYC661	NYC665	NYC662
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07301	A07302	A07303	A07304
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb.	ppb.	ppb.	ppb.	ppb.	ppb.
Propylene	RL	RL	RL	RL	150	39
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	53
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	48
Acetone	RL	RL	72	30	110	1300
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	75
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	250	67
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	39
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	46	69
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	28
m&p-Xylenes	RL	RL	RL	RL	RL	51
o-Xylene	RL	RL	RL	RL	RL	24
Styrene	RL	RL	RL	RL	50	66
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday - Monday, January 5 -7, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:30 p.m. on 1/7

Air: Fixed Monitors in New York:
Asbestos - EPA analyzed 118 samples taken in and around ground zero from December 29 through January 1. In addition, EPA sampled for asbestos at two lower Manhattan locations from December 29 through January 2. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,319, with 30 samples above the standard (27 of these were collected prior to September 30, the other three were collected on October 9, November 27 and December 27).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Public School 154 (33 East 135th St., Bronx), Intermediate School 143 (511 W. 182nd St., Manhattan), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) from December 29 through January 2. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - Thirty-four air samples collected on December 31 and January 2 were analyzed for asbestos. All were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 3-5 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 4, 5 and 6 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 4, 5 and 6 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day. Benzene did not exceed the OSHA standard in any samples on Jan. 4, however samples taken at the North Tower debris pile on Jan. 5 and 6 exceeded the standard. All samples taken at EPA's Wash Tent (West St. and Murray), Austin Tobin Plaza and the South Tower debris pile showed no detectable levels of benzene.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 4, 5 and 6. Several readings noted during the afternoon of Jan. 4 showed carbon monoxide levels at or above the National Ambient Air Quality Standard (8-hour average) of 9 ppm. Low levels of carbon monoxide were also found on January 6. No significant readings were found on January 5.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, January 7, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Dec 29, 1200 - 2359 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
2 samples (Locations D and L-duplicate) were not collected due to equipment malfunctions.
1 location (Location T) was not sampled since access to that location was not available.

NYC / ER (Dec 30, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access to that location was not available.
Note: Low sample volume recorded.

NYC / ER (Dec 30, 1200 - 2359 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
1 sample (Location B) was not collected due to equipment malfunction.
1 location (Location T) was not sampled since access to that location was not available.

NYC / ER (Dec 31, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location T) was not sampled since access to that location was not available.
Note: Low sample volume recorded.

NYC / ER (Dec 31, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
4 samples (Locations I, U, P, and T) were not collected due to equipment malfunctions.

NYC / ER (Jan 1, 2002, 0001 - 1200 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
2 samples (Locations B and V) were not collected due to equipment malfunctions.
1 location (Location T) was not sampled since access to that location was not available.

Landfill Ambient Air Sampling Locations

Fresh Kills (Dec 31, 0745 - 2135 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 location (Location P-1) was not analyzed due to overloading of particulates.
Note: Low sample volume recorded

Fresh Kills (Jan 1, 2002)

No monitoring conducted.

Fresh Kills (Jan 2, 0750 - 2156 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
1 sample (Location B-13) was not collected due to equipment malfunction.
2 locations (Locations W-11 and W-12A) were not analyzed due to overloading of particulates.

Fresh Kills (Jan 2) - Particulate Monitoring (Dataram)

Resubmittal: Previously reported readings at station P-3. Readings were actually from station P-2. All other data remains the same.

Fresh Kills (Jan 3) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Jan 4) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Jan 5) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Dec 29 - Jan 2, 2002) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 35 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 4) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6½ hours.
Station L values ranged from 0.2 to 203.4 ug/m^3 with an average of 14.3 ug/m^3.
Station N values ranged from 0.0 to 77.6 ug/m^3 with an average of 10.6 ug/m^3.
Station R values ranged from 0.1 to 85.4 ug/m^3 with an average of 13.3 ug/m^3.

NYC / ER (Jan 5) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 11.6 to 155.4 ug/m^3 with an average of 28.1 ug/m^3.
Station N values ranged from 19.8 to 61.3 ug/m^3 with an average of 24.6 ug/m^3.
Station R values ranged from 3.2 to 59.1 ug/m^3 with an average of 26.1 ug/m^3.

NYC / ER (Jan 6) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 29.4 to 190.0 ug/m^3 with an average of 46.7 ug/m^3.
Station N values ranged from 32.1 to 176.2 ug/m^3 with an average of 45.2 ug/m^3.
Station R values ranged from 28.7 to 128.4 ug/m^3 with an average of 46.4 ug/m^3.

NYC / ER (Jan 4) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, and South Tower), including in the debris area at ground level.

NYC / ER (Jan 5) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
All 3 of the other samples (Washing Tent, Austin Tobin Plaza, and South Tower) did not note any benzene above the detection limit (20 ppbv).

NYC / ER (Jan 6) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
All 3 of the other samples (Washing Tent, Austin Tobin Plaza, and South Tower) did not note any benzene above the detection limit (20 ppbv).

Direct Reading Instruments

NYC / ER (Jan 4)

Several readings noted during the afternoon at or above the carbon monxide NAAQS (8-hour average) of 9 ppm.
Otherwise, nothing of significance reported.

NYC / ER (Jan 5)

Nothing of significance reported.

NYC / ER (Jan 6)

Low levels of carbon monoxide noted at nearly all stations during both monitoring periods.
Otherwise, nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/29/01 1200 to 2359

Data Validation Date: 01/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
12/29/01	RST-02570	L	669	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/29/01	-	L-Duplicate	NS	NS	NS	NS	NS	NS	NS	NS
12/29/01	RST-02571	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02572	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02573	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02574	J	412	Air	<7.0	<0.007	0	0	<8.00	<0.0075
12/29/01	RST-02575	Q	720	Air	<7.0	<0.004	0	2***	17.78	0.0095
12/29/01	RST-02576	F	349	Air	<7.0	<0.008	0	0	<8.00	<0.0088
12/29/01	RST-02577	A	613	Air	7.64	0.005	0	0	<8.00	<0.0050
12/29/01	RST-02578	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02579	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02580	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02581	I	604	Air	<7.0	<0.004	0	0	<8.00	<0.0051
12/29/01	-	D	NS	NS	NS	NS	NS	NS	NS	NS
12/29/01	RST-02582	K	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/29/01	RST-02583	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02584	V	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/29/01	RST-02585	S	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/29/01	RST-02586	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02587	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	RST-02588	W	720	Air	7.01	0.004	5***	0	44.44	0.0238
12/30/01	FB123001	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/30/01	TB123001	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-29-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/30/01 0001 to 1200

Data Validation Date: 01/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
12/30/01	RST-02589	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02590	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02591	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02592	N	601	Air	<7.0	<0.004	0	0	<8.00	<0.0051
12/30/01	RST-02593	J	595	Air	<7.0	<0.005	1***	0	8.00	0.0052
12/30/01	RST-02594	J-Duplicate	685	Air	7.01	0.004	0	0	<8.00	<0.0045
12/30/01	RST-02595	Q	665	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/30/01	RST-02596	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02597	A	720	Air	11.46	0.006	0	0	<8.89	<0.0048
12/30/01	RST-02598	C	585	Air	7.64	0.005	0	0	<8.00	<0.0053
12/30/01	RST-02599	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02600	H	450	Air	<7.0	<0.006	0	0	<8.00	<0.0068
12/30/01	RST-02601	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02602	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02603	K	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/30/01	RST-02604	U	73****	Air	<7.0	<0.037	0	0	<8.89	<0.0469
12/30/01	RST-02605	V	601	Air	<7.0	<0.004	0	0	<8.00	<0.0051
12/30/01	RST-02606	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02607	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02608	E	628	Air	<7.0	<0.004	0	0	<8.00	<0.0049
12/30/01	RST-02609	W	720	Air	10.19	0.005	1***	0	8.89	0.0048
12/30/01	FB123001	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/30/01	TB123001	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
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F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
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**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-30-01-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/31/01 0745 to 2135

Data Validation Date: 01/03/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
12/31/01	LF01898	P-1	720	Air	<7.0	<0.004	NA [1]	NA [1]	NA [1]	NA [1]
12/31/01	LF01899	P-2	58 [a]	Air	<7.0	<0.047	0	0	<7.87	<0.0523
12/31/01	LF01900	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01901	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01902	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01903	P-6	547	Air	<7.0	<0.005	0	0	<8.75	<0.0062
12/31/01	LF01904	P-7	648	Air	<7.0	<0.004	0	0	<7.87	<0.0047
12/31/01	LF01905	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01906	W-11	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01907	W-12A	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
12/31/01	LF01908	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01909	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01910	B-14	720	Air	<7.0	<0.004	4***	0	35.00	0.0187
12/31/01	LF01911	T-15	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01912	T-16	720	Air	<7.0	<0.004	3***	0	26.25	0.0140
12/31/01	LF01913	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01914	O-18	704	Air	<7.0	<0.004	0	0	<8.75	<0.0048
12/31/01	LF01915	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/31/01	LF01916	MPHS-20	720	Air	15.29	0.008	5***	1****	52.49	0.0281
12/31/01	LF01917	Lot Blank	0	Air	<7.0	n/a	0	0	NA [2]	NA [2]
12/31/01	LF01918	Trip Blank	0	Air	<7.0	n/a	0	0	NA [2]	NA [2]

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
****Amosite
NA [1] - Not analyzed due to overloading of particulates
NA [2] - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
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[a] - Extremely low sample volume collected

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-12-31-01-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/30/01 1200 to 2359

Data Validation Date: 01/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
12/30/01	RST-02610	L	680	Air	<7.0	<0.004	0	0	<8.00	<0.0045
12/30/01	RST-02611	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02612	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02613	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02614	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02615	F	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/30/01	RST-02616	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02617	A-Duplicate	720	Air	12.74	0.007	0	0	<8.89	<0.0048
12/30/01	RST-02618	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	-	B	NS	NS	NS	NS	NS	NS	NS	NS
12/30/01	RST-02619	B-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02620	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02621	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02622	O	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02623	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02624	U	320	Air	<7.0	<0.008	0	0	<8.89	<0.0107
12/30/01	RST-02625	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02626	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02627	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02628	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/30/01	RST-02629	W	720	Air	<7.0	<0.004	1***	2***	26.67	0.0143
12/31/01	FB123101	Field Blank	0	Air	<7.0	n/a	NA(3)	NA(2)	NA(2)	NA(2)
12/31/01	TB123101	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
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H: South side of Chase Manhattan Plaza at Pine St.
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method: volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-30-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/31/01 0001 to 1200

Data Validation Date: 01/04/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
12/31/01	RST-02630	L	681	Air	<7.0	<0.004	0	0	<8.00	<0.0045
12/31/01	RST-02631	M1	691	Air	<7.0	<0.004	0	0	<8.00	<0.0045
12/31/01	RST-02632	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02633	J	621	Air	<7.0	<0.004	1***	0	8.00	0.0050
12/31/01	RST-02634	Q	668	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/31/01	RST-02635	F	595	Air	<7.0	<0.005	1***	1***	16.00	0.0104
12/31/01	RST-02636	A	705	Air	8.92	0.005	0	0	<8.89	<0.0049
12/31/01	RST-02637	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02638	C-Duplicate	663	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/31/01	RST-02639	B	624	Air	<7.0	<0.004	1***	0	8.00	0.0049
12/31/01	RST-02640	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02641	H-Duplicate	676	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/31/01	RST-02642	I	662	Air	<7.0	<0.004	0	0	<8.00	<0.0047
12/31/01	RST-02643	D	692	Air	<7.0	<0.004	1***	0	8.00	0.0045
12/31/01	RST-02644	K	676	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/31/01	RST-02645	U	634	Air	<7.0	<0.004	0	0	<8.00	<0.0049
12/31/01	RST-02646	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02647	S	508	Air	<7.0	<0.005	0	0	<8.00	<0.0061
12/31/01	RST-02648	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02649	E	668	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/31/01	RST-02650	W	204	Air	<7.0	<0.013	0	0	<8.00	<0.0151
12/31/01	FB123101	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
12/31/01	TB123101	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-31-01-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/31/01 1200 to 2359

Data Validation Date: 01/04/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
12/31/01	RST-02651	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02652	L-Duplicate	673	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/31/01	RST-02653	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02654	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02655	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02656	J-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02657	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02658	F	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/31/01	RST-02659	A	720	Air	8.92	0.005	1***	2***	26.67	0.0143
12/31/01	RST-02660	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02661	B	346	Air	<7.0	<0.008	0	0	<8.00	<0.0089
12/31/01	RST-02662	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	-	I	NS	Air	NS	NS	NS	NS	NS	NS
12/31/01	RST-02663	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02664	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	-	U	NS	Air	NS	NS	NS	NS	NS	NS
12/31/01	RST-02665	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	RST-02666	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	-	P	NS	Air	NS	NS	NS	NS	NS	NS
12/31/01	RST-02667	E	638	Air	<7.0	<0.004	0	0	<8.00	<0.0048
12/31/01	RST-02668	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/31/01	-	T	NS	Air	NS	NS	NS	NS	NS	NS
01/01/02	FB010102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/01/02	TB010102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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N: South side of Pier 25 (next to volleyball ct)
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Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-12-31-01-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/01/02 0001 to 1200

Data Validation Date: 01/04/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/01/02	RST-02669	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02670	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02671	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02672	N-Duplicate	676	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/01/02	RST-02673	J	600	Air	<7.0	<0.004	0	0	<8.00	<0.0051
01/01/02	RST-02674	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02675	Q-Duplicate	533	Air	<7.0	<0.005	0	0	<8.00	<0.0058
01/01/02	RST-02676	F	578	Air	<7.0	<0.005	0	0	<8.00	<0.0053
01/01/02	RST-02677	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02678	C	676	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/01/02	-	B	NS	Air	NS	NS	NS	NS	NS	NS
01/01/02	RST-02679	H	575	Air	<7.0	<0.005	0	0	<8.00	<0.0054
01/01/02	RST-02680	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02681	D	578	Air	<7.0	<0.005	0	0	<8.00	<0.0053
01/01/02	RST-02682	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02683	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	-	V	NS	Air	NS	NS	NS	NS	NS	NS
01/01/02	RST-02684	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02685	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/01/02	RST-02686	E	624	Air	<7.0	<0.004	0	0	<8.00	<0.0049
01/01/02	RST-02687	W	569	Air	<7.0	<0.005	0	0	<8.00	<0.0054
01/01/02	FB010102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/01/02	TB010102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

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Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-01-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/02/02 0750 to 2156

Data Validation Date: 1/05/2002

					PCM by NIOSH 7400		TEM (A HERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
01/02/02	LF01919	P-1	661	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/02/02	LF01920	P-2	553	Air	<7.0	<0.005	0	0	<7.87	<0.0055
01/02/02	LF01921	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/02/02	LF01922	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/02/02	LF01923	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/02/02	LF01924	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/02/02	LF01925	P-7	707	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/02/02	LF01926	P-8	720	Air	<7.0	<0.004	4***	0	35.00	0.0187
01/02/02	LF01927	W-11	720	Air	<7.0	<0.004	NA(1)	NA(1)	NA(1)	NA(1)
01/02/02	LF01928	W-12A	720	Air	17.83	0.010	NA(1)	NA(1)	NA(1)	NA(1)
01/02/02	LF01929	W-12B	720	Air	15.29	0.008	3***	1***	35.00	0.0187
01/02/02	LF01930	B-13	NS	NS	NS	NS	NS	NS	NS	NS
01/02/02	LF01931	B-14	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/02/02	LF01932	T-15	720	Air	15.29	0.008	0	0	<8.75	<0.0047
01/02/02	LF01933	T-16	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
01/02/02	LF01934	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/02/02	LF01935	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/02/02	LF01936	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/02/02	LF01937	MPHS-20	691	Air	<7.0	<0.004	3***	0	26.25	0.0146
01/02/02	LF01938	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/02/02	LF01939	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-02-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/29/01 1200 to 2400

Data Validation Date: 01/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/29/01	7093-18-0093	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/29/01	7093-19-0093	Chambers Street	1164***	Air	<7.0	<0.002	0	0	<13.33	<0.0044
12/29/01	7093-15-0091	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/29/01	7094-09-0082	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/29/01	7096-12-0087	Queens PS #199	1136***	Air	<7.0	<0.002	0	0	<13.33	<0.0045
12/29/01	7095-98-0087	Brooklyn PS #274	1244	Air	<7.0	<0.002	0	0	<13.33	<0.0041
12/29/01	7097-18-0084	Staten Island PS #44	1386	Air	<7.0	<0.002	0	0	<16.00	<0.0044

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-29-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/30/01 1200 to 2400

Data Validation Date: 01/05/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/30/01	7093-18-0094	Park Row	1394	Air	<7.0	<0.002	0	0	<16.00	<0.0044
12/30/01	7093-19-0094	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/30/01	7093-15-0092	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/30/01	7094-09-0083	Bronx PS #154	1428	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/30/01	7096-12-0088	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/30/01	7095-98-0088	Brooklyn PS #274	1252	Air	<7.0	<0.002	0	0	<16.00	<0.0049
12/30/01	7097-18-0085	Staten Island PS #44	1350	Air	<7.0	<0.002	0	0	<16.00	<0.0046

Key:

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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-30-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/31/01 1200 to 2400

Data Validation Date: 01/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
12/31/01	7093-18-0095	Park Row	1186***	Air	9.55	0.003	0	0	<13.33	<0.0043
12/31/01	7093-19-0095	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/31/01	7093-15-0093	Manhattan IS #143	790***	Air	<7.0	<0.003	0	0	<8.89	<0.0043
12/31/01	7094-09-0084	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/31/01	7096-12-0089	Queens PS #199	1026***	Air	<7.0	<0.003	0	0	<13.33	<0.0050
12/31/01	7095-98-0089	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/31/01	7097-18-0086	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

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**** Chrysotile
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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-31-01pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/01/02 1200 to 2400

Data Validation Date: 01/05/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
01/01/02	7093-18-0096	Park Row	1408	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/01/02	7093-19-0096	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/01/02	7093-15-0094	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/01/02	7094-09-0085	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/01/02	7096-12-0090	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/01/02	7095-98-0090	Brooklyn PS #274	1422	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/01/02	7097-18-0087	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-01-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/02/02 1200 to 2400

Data Validation Date: 01/05/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
01/02/02	7093-18-0097	Park Row	1326	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/02/02	7093-19-0097	Chambers Street	1220	Air	<7.0	<0.002	1***	0	13.33	0.0042
01/02/02	7093-15-0095	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/02/02	7094-09-0086	Bronx PS #154	1388	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/02/02	7096-12-0091	Queens PS #199	858***	Air	<7.0	<0.003	0	0	<10.00	<0.0045
01/02/02	7095-98-0091	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/02/02	7097-18-0088	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-02-02pm.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 5, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	39	09:45:00	10	00:15:00	0	0.0	8.2	55.5	872.7
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	38	09:30:00	10	00:15:00	100	0.0	9.3	27.0	169.9
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	38	09:30:00	10	00:15:00	100	0.0	10.2	26.2	338.6

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 3, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	42	10:30:00	10	00:15:00	100	0.0	0.0	18.7	1088.2
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	35	08:45:00	10	00:15:00	100	0.0	10.3	16.8	101.4
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	43	09:45:00	10	00:15:00	100	0.0	5.2	69.9	2003.4

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 4, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	43	10:45:00	10	00:15:00	100	0.0	1.7	44.4	1648.0
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	44	11:00:00	10	00:15:00	100	0.0	10.3	17.4	71.9
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	42	10:30:00	10	00:15:00	100	0.0	2.8	49.3	2757.9

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 2, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	0	1	45	11:15:00	10	00:15:00	100	0.0	0.0	52.4	3018.7
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	44	11:00:00	10	00:15:00	100	0.0	3.2	15.1	355.4
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	43	10:45:00	10	00:15:00	100	0.0	0.0	59.0	1935.3

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: J. O. Adams

U.S. EPA: Norrell

Date: 1/6/02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2643	2647	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0810	0813	0827			
Stop Time	14:04	14:07	14:12			
Run Time (Minutes)	354	354	345			
Minimum Concentration (ug/m3)	28.7	29.4	32.1			
Maximum Concentration (ug/m3)	128.4	190.0	176.2			
Average Concentration (TWA) (ug/m3)	46.4	46.7	45.2			

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: E. Hoffman

U.S. EPA: Norrell

Date: 1/5/02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2643	2647	2646			
Flow Rate (Liters / Minute)	2 L/m	2 L/m	2 L/m			
Start Time	1258	1301	1216			
Stop Time	1439	1411	1413			
Run Time (Minutes)	370	369	357			
Minimum Concentration (ug/m3)	3.2	11.6	19.8			
Maximum Concentration (ug/m3)	59.1	155.4	61.3			
Average Concentration (TWA) (ug/m3)	26.1	28.1	24.6			

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: E. Hoffman

U.S. EPA: Norrell

Date: 1/4/02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2646	2643	2647			
Flow Rate (Liters / Minute)	2 L/m	2 L/m	2 L/m			
Start Time	1204	1205	1206			
Stop Time	1450 ~~1450~~	1451 ~~1452~~	1455			
Run Time (Minutes)	406	406	396			
~~Minimum~~ Concentration (ug/m3)	0.1	0.2	0.0			
Maximum Concentration (ug/m3)	85.4	203.4	77.6			
Average Concentration (TWA) (ug/m3)	13.3	14.3	10.06 (10.2)			

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/05/02

File Name	NYC679	NYC680	NYC681	NYC682	NYC684	NYC683
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07309	A07310	A07311	A07312
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**1500**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**880**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	**47**	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	**43**	**640**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**62**	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**160**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	**21**	RL
Tetrahydrofuran	RL	RL	RL	RL	**84**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**1700**	RL
Heptane	RL	RL	RL	RL	**42**	RL
Trichloroethene	RL	RL	RL	RL	**24**	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	**21**	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**1200**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	**62**	RL
Ethylbenzene	RL	RL	RL	RL	**1800**	RL
m&p-Xylenes	RL	RL	RL	RL	**72**	RL
0-Xylene	RL	RL	RL	RL	**35**	RL
Styrene	RL	RL	RL	RL	**510**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	**22**	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/04/02

File Name	NYC669	NYC670	NYC671	NYC672	NYC675	NYC673
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07305	A07306	A07307	A07308
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	**150**	RL
Chlorodifluoromethane	RL	RL	RL	RL	**RL**	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**370**	RL
Vinyl Chloride	RL	RL	RL	RL	**RL**	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	**24**	RL
Acetone	RL	RL	**36**	**120**	**1300**	**630**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-D-chloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**240**	**56**
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	**87**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**210**	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**100**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	**28**	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**88**	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
O-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	**55**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS. TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/06/02

File Name	NYC689	NYC690	NYC691	NYC692	NYC694	NYC693
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07313	A07315	A07314	A07316
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	2900	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	1500	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	98	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	1200	45
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	R
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	97	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	310	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	80	RL
Tetrahydrofuran	RL	RL	RL	RL	330	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	2800	RL
Heptane	RL	RL	RL	RL	63	RL
Trichloroethene	RL	RL	RL	RL	63	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	42	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	45	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	1400	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	26	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	150	RL
Ethylbenzene	RL	RL	RL	RL	1900	RL
m&p-Xylenes	RL	RL	RL	RL	180	RL
o-Xylene	RL	RL	RL	RL	78	RL
Styrene	RL	RL	RL	RL	560	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	59	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	36	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	44	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	45	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	45	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	27	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Early

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Early

DATE: 1/6/02

RST: B.J. Hoffman

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
R	0817	*	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
L	0821		ND	ND	20.8	3	ND	ND	ND	ND	ND	ND	ND
M1	0829 *		ND	ND	20.8	1	ND	ND	ND	ND	ND	ND	ND
N	0831		ND	ND	20.8	2	ND	ND	ND	ND	ND	ND	ND
J	0835		ND	.1	20.8	6	ND	ND	ND	ND	ND	ND	ND
Q	0839		ND	ND	20.8	6	ND	ND	ND	ND	ND	ND	ND
F	0844		ND	.7	20.8	4	ND	ND	ND	ND	ND	ND	ND
A	0852		ND	ND	20.8	6	ND	ND	ND	ND	ND	ND	ND
C	0902		ND	ND	20.7	2	ND	ND	ND	ND	ND	ND	ND
B	0906		ND	.1	20.7	1	ND	ND	ND	ND	ND	ND	ND
H	0913		ND	.4	20.7	4	ND	ND	ND	ND	ND	ND	ND
I	0919		ND	.1	20.8	3	ND	ND	ND	ND	ND	ND	ND
D	0925		ND	.1	20.8	2	ND	ND	ND	ND	ND	ND	ND
K	0932		ND	ND	20.8	8	ND	ND	ND	ND	ND	ND	ND
T	0939	— ND	ACCESS			TO		SAMPLE		LOCATION			—
U	0942		ND	.1	20.8	6	ND	ND	ND	ND	ND	ND	ND
V	0946		ND	ND	20.8	1	ND	ND	ND	ND	ND	ND	ND
S	0957		ND	.2	20.8	6	ND	ND	ND	ND	ND	ND	ND
P	1002		ND	.1	20.8	5	ND	ND	ND	ND	ND	ND	ND
E	1006		ND	.3	20.8	9	ND	ND	ND	ND	ND	ND	ND

Location A: Barkley and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Late

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Late

DATE: 1/6/02

RST: B Hoffman

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1209	*	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
M1	1212		ND	1	21.2	2	ND	ND	ND	ND	ND	ND	ND
N	1216		ND	1	21.1	6	ND	ND	ND	ND	ND	ND	ND
J	1220		ND	1	21.1	4	ND	ND	ND	ND	ND	ND	ND
Q	1224		ND	1	21.1	2	ND	ND	ND	ND	ND	ND	ND
F	1226		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
A	1231		ND	1	21.1	3	ND	ND	ND	ND	ND	ND	ND
C	1237		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
B	1238		ND	ND	21.1	6	ND	ND	ND	ND	ND	ND	ND
H	1244		ND	.1	21.0	4	ND	ND	ND	ND	ND	ND	ND
I	1252		ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
D	1256		ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
K	1303		.2	ND	21.0	4	ND	ND	ND	ND	ND	ND	ND
T	1310	UNABLE TO SAMPLE LOCATION -- NOT ACCESSIBLE											
U	1310		ND	ND	21.0	3	ND	ND	ND	ND	ND	ND	ND
V	1313		.1	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
S	1328		ND	ND	20.9	6	ND	ND	ND	ND	ND	ND	ND
P	1332		ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
E	1335		ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND

Location A: Barkley and West Broadway
Location B: Church and Dey
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Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/5/02

RST: B. Hoffman

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$CDCl_2$ (ppb)
L	0803	ND	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
M1	0810	ND	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
N	0817	ND	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND
J	0823	ND	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
Q	0827	ND	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND
F	0832	ND	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
A	0843	ND	ND	ND	20.3	1	ND	ND	ND	ND	ND	ND	ND
C	0853	ND	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND
B	0900	ND	ND	.1	20.3	ND	ND	ND	ND	ND	ND	ND	ND
H	0908	ND	ND	1.7	20.3	6	ND	ND	ND	ND	ND	ND	ND
E	0918	ND	ND	.1	20.3	ND	ND	ND	ND	ND	ND	ND	ND
D	0924	ND	ND	1	20.3	2	ND	ND	ND	ND	ND	ND	ND
K	0930	ND	ND	.1	20.3	ND	ND	ND	ND	ND	ND	ND	ND
T	NO	ACCESS	TO	PUMP	AREA								
U	0941	ND	ND	ND	20.3	4	ND	ND	ND	ND	ND	ND	ND
V	0946	ND	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND
S	0955	ND	ND	ND	20.3	2	ND	ND	ND	ND	ND	ND	ND
P	0959	ND	ND	.6	20.3	ND	ND	ND	ND	ND	ND	ND	ND
E	1005	ND	ND	.4	20.4	6	ND	ND	ND	ND	ND	ND	ND

Location A: Barkley and West Broadway
Location B: Church and Dey
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Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/5/00

RST: Late B Hoffman

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1219	~~ND~~ 2.1	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND
M1	1221	~~ND~~ 2.1	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND
N	1223	*	ND	.1	20.4	5	ND	ND	ND	ND	ND	ND	ND
J	1227		ND	.1	20.4	4	ND	ND	ND	ND	ND	ND	ND
Q	1232		ND	.2	20.5	1	ND	ND	ND	ND	ND	ND	ND
F	1235		ND	.2	20.5	ND	ND	ND	ND	ND	ND	ND	ND
A	1245		ND	.1	20.6	ND	ND	ND	ND	ND	ND	ND	ND
B	1248		ND	ND	20.6	ND	ND	ND	ND	ND	ND	ND	ND
C	1250		ND	.1	20.5	ND	ND	ND	ND	ND	ND	ND	ND
I ~~H~~	1259		ND	.3	20.5	4	ND	ND	ND	ND	ND	ND	ND
D	1305		ND	.2	20.7	6	ND	ND	ND	ND	ND	ND	ND
K	1309		ND	.2	20.7	2	ND	ND	ND	ND	ND	ND	ND
T	1315		~~BY~~	~~NT~~	~~20.7~~	~~2~~	SAMPLE AREA NOT ACCESSIBLE						
U	1315		ND	ND	20.7	2	ND	ND	ND	ND	ND	ND	ND
V	1320		ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
S	1335		ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
P	1336		ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
E	1340		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
H	1350		ND	ND	20.6	ND	ND	ND	ND	ND	ND	ND	ND

* FID will not stay ignited

Location A: Barclay and West Broadway
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Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Early

DATE: 11/4/02

RST: [illegible] Hoffman

Location	Time	FID (units)	FID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0800	*	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
M1	0815		ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
V	0821		ND	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
J	0827		ND	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
X	0832		ND	ND	20.7	3	ND	ND	ND	ND	ND	ND	ND
F	0836		ND	ND	20.6	2	ND	ND	ND	ND	ND	ND	ND
A	0850		ND	ND	20.5	1	ND	ND	ND	ND	ND	ND	ND
B	0859		ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	ND
C	0902		ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	ND
H	0914		ND	ND	20.5	1	ND	ND	ND	ND	ND	ND	ND
I	0926		ND	~~ND~~	20.5	7	ND	ND	ND	ND	ND	ND	ND
E	0934		ND	ND	20.5	2	ND	ND	ND	ND	ND	ND	ND
K	0943		ND	ND	20.5	4	ND	ND	ND	ND	ND	ND	ND
T	0954		ND	ND	20.5	2	ND	ND	ND	ND	ND	ND	ND
M	0959		ND	ND	20.5	1	ND	ND	ND	ND	ND	ND	ND
Y	1009		ND	ND	20.6	ND	ND	ND	ND	ND	ND	ND	ND
S	1018		ND	ND	20.6	ND	ND	ND	ND	ND	ND	ND	ND
P	1026		ND	ND	20.5	3	ND	ND	ND	ND	ND	ND	ND
G	1032		ND	ND	20.5	2	ND	ND	ND	ND	ND	ND	ND

* Flame wouldn't light up.

Location A: Barkley and West Broadway
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United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Late

DATE: 9/8/01 RST: B [illegible]

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1233	*	ND	ND	20.6	ND	ND	ND	ND	ND	ND	ND	ND
M1	1235		ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
N	1238		ND	ND	20.6	1	ND	ND	ND	ND	ND	ND	ND
J	1242		ND	ND	20.6	3	ND	ND	ND	ND	ND	ND	ND
Q	1245		ND	ND	20.6	10	ND	ND	ND	ND	ND	ND	ND
F	1247		ND	ND	20.7	1	ND	ND	ND	ND	ND	ND	ND
A	1306		ND	ND	20.8	6	ND	ND	ND	ND	ND	ND	ND
B	1311		ND	ND	20.8	7	ND	ND	ND	ND	ND	ND	ND
C	1315		ND	ND	20.8	6	ND	ND	ND	ND	ND	ND	ND
H	1323		ND	ND	20.8	13	ND	ND	ND	ND	ND	ND	ND
I	1329		ND	ND	20.7	1	ND	ND	ND	ND	ND	ND	ND
D	1341		ND	ND	20.9	3	ND	ND	ND	ND	ND	ND	ND
K	1345		ND	1	20.9	7	ND	ND	ND	ND	ND	ND	ND
T	1350		ND	ND	20.9	3	ND	ND	ND	ND	ND	ND	ND
U	1355		ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
V	1353		ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
S	1407		ND	ND	20.9	3	ND	ND	ND	ND	ND	ND	ND
P	1411		ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
E	1416		ND	ND	21.0	2	ND	ND	ND	ND	ND	ND	ND

* Flame wouldn't light up.

Location A: Barkley and West Broadway
Location B: Church and Dey
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Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, January 8, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:00 p.m. on 1/8

Air: Fixed Monitors in New York:
Asbestos - EPA analyzed 41 samples taken in and around ground zero on January 3 and 4. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,360, with 30 samples above the standard (27 of these were collected prior to September 30, the other three were collected on October 9, November 27 and December 27).

Staten Island Landfill:
Air (Asbestos) - Thirty-eight air samples collected on January 3 and 4 were analyzed for asbestos. All were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 6 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 7 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

Samples taken at the North Tower debris pile exceeded the OSHA standards for both benzene and 1,3-butadiene on January 7. All samples taken at EPA's Wash Tent (West St. and Murray), Austin Tobin Plaza and the South Tower debris pile showed no detectable levels of either benzene or 1,3-butadiene on January 7.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 7. Nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, January 8, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 1, 1200 - 2359 hrs)

Results pending.

NYC / ER (Jan 2, 0001 - 1200 hrs)

Results pending.

NYC / ER (Jan 2, 1200 - 2359 hrs)

Results pending.

NYC / ER (Jan 3, 0001 - 1200 hrs)

Result spending.

NYC / ER (Jan 3, 1200 - 2359 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
2 samples (Locations J and K-duplicate) were not collected due to equipment malfunctions.

NYC / ER (Jan 4, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location W) was not collected due to an equipment malfunction.
Note: Low sample volume recorded.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 3, 0755 - 2230 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Jan 4, 0745 - 2157 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: The results for Location W-11 indicate a total of 4 structures. There were 2 structures identified for each size classification. One of the structures was chrysotile, the other was amosite.

Fresh Kills (Jan 6) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Jan 7) - Particulate Monitoring (Dataram)

Particulate monitoring at three locations (Stations L, N, R) was not conducted due to weather conditions.

NYC / ER (Jan 7) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
All 3 of the other samples (Washing Tent, Austin Tobin Plaza, and South Tower) did not note any benzene above the detection limit (20 ppbv).
1,3-Butadiene exceeded OSHA PEL (1 ppm) at one location (North Tower) on the debris pile in the plume at ground level.
All 3 of the other samples did not note any 1,3-Butadiene above the detection limit (20 ppbv).

Direct Reading Instruments

NYC / ER (Jan 7)

Nothing of significance reported in the limited monitoring conducted.
Monitoring impacted by weather conditions.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/03/02 1200 to 2359

Data Validation Date: 01/06/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/03/02	RST-02776	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02777	M1	704	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/03/02	RST-02778	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	-	J	NS	Air	NS	NS	NS	NS	NS	NS
01/03/02	RST-02779	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02780	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02781	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02782	B	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/03/02	RST-02783	C	720	Air	15.29	0.008	0	0	<8.89	<0.0048
01/03/02	RST-02784	H	595	Air	<7.0	<0.005	0	0	<8.00	<0.0052
01/03/02	RST-02785	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02786	D	633	Air	16.56	0.010	0	0	<8.00	<0.0049
01/03/02	RST-02787	K	720	Air	14.65	0.008	0	0	<8.89	<0.0048
01/03/02	-	K-Duplicate	NS	Air	NS	NS	NS	NS	NS	NS
01/03/02	RST-02788	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02789	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02790	U-Duplicate	605	Air	7.64	0.005	0	0	<8.00	<0.0051
01/03/02	RST-02791	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02792	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02793	P	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/03/02	RST-02794	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02795	W	720	Air	14.01	0.007	0	0	<8.89	<0.0048
01/04/02	FB010402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/04/02	TB010402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-03-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/04/02 0001 to 1200

Data Validation Date: 01/06/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
01/04/02	RST-02796	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02797	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02798	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02799	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02800	Q	696	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/04/02	RST-02801	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02802	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02803	B	720	Air	12.74	0.007	0	0	<8.89	<0.0048
01/04/02	RST-02804	C	720	Air	12.10	0.006	0	0	<8.89	<0.0048
01/04/02	RST-02805	H	720	Air	11.46	0.006	0	0	<8.89	<0.0048
01/04/02	RST-02806	I	662	Air	10.19	0.006	0	0	<8.00	<0.0047
01/04/02	RST-02807	D	609	Air	19.11	0.012	0	0	<8.00	<0.0051
01/04/02	RST-02808	K	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/04/02	RST-02809	T	276	Air	<7.0	<0.010	0	0	<8.00	<0.0112
01/04/02	RST-02810	T-Duplicate	720	Air	12.74	0.007	0	0	<8.89	<0.0048
01/04/02	RST-02811	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02812	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02813	V-Duplicate	524	Air	<7.0	<0.005	0	0	<8.00	<0.0059
01/04/02	RST-02814	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02815	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02816	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	-	W	NS	Air	NS	NS	NS	NS	NS	NS
01/04/02	FB010402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/04/02	TB010402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
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F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
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T: Pier 6 Heliport
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V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-04-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/03/02 0755 to 2230

Data Validation Date: 01/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	Structures (#) 0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/03/02	LF01940	P-1	720	Air	NA (1)	NA (1)	0	1****	8.75	0.0047
01/03/02	LF01941	P-2	491	Air	<7.0	<0.0055	1***	0	7.87	0.0062
01/03/02	LF01942	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/03/02	LF01943	P-4	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/03/02	LF01944	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/03/02	LF01945	P-6	527	Air	<7.0	<0.005	0	0	<7.87	<0.0058
01/03/02	LF01946	P-7	664	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/03/02	LF01947	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/03/02	LF01948	W-11	720	Air	7.64	0.004	1***	0	8.75	0.0047
01/03/02	LF01949	W-12A	720	Air	30.57	0.016	3***	0	26.25	0.0140
01/03/02	LF01950	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/03/02	LF01951	B-13	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/03/02	LF01952	B-14	720	Air	NA (1)	NA (1)	0	0	<8.75	<0.0047
01/03/02	LF01953	T-15	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/03/02	LF01954	T-16	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/03/02	LF01955	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/03/02	LF01956	O-18	693	Air	7.64	0.004	0	0	<8.75	<0.0049
01/03/02	LF01957	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/03/02	LF01958	MPHS-20	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/03/02	LF01959	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/03/02	LF01960	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
****Actinolite
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NC - Sample not collected
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-03-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/04/02 0745 to 2157

Data Validation Date: 01/06/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/04/02	LF01961	P-1	720	Air	8.92	0.005	0	0	<8.75	<0.0047
01/04/02	LF01962	P-2	536	Air	<7.0	<0.005	0	0	<7.87	<0.0057
01/04/02	LF01963	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01964	P-4	720	Air	12.74	0.007	0	0	<8.75	<0.0047
01/04/02	LF01965	P-5	720	Air	10.19	0.005	0	0	<8.75	<0.0047
01/04/02	LF01966	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01967	P-7	670	Air	<7.0	<0.004	0	0	<7.87	<0.0045
01/04/02	LF01968	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01969	W-11	720	Air	<7.0	<0.004	1*** 1****	1*** 1****	31.50	0.0168
01/04/02	LF01970	W-12A	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01971	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01972	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01973	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01974	T-15	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01975	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01976	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01977	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01978	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/04/02	LF01979	MPHS-20	654	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/04/02	LF01980	Lot Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)
01/04/02	LF01981	Trip Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
****Amosite
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NC - Sample not collected
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Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-04-02-am.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 6, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	35	08:45:00	10	00:15:00	100	0.0	22.0	42.2	392.5
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	34	08:30:00	10	00:15:00	100	0.0	33.1	61.8	968.9
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	34	08:30:00	10	00:15:00	100	0.0	26.8	50.9	887.9

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/07/02

File Name	NYC699	NYC700	NYC701	NYC702	NYC704	NYC703
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower Plume	South Tower Plume
Sample Number			A07317	A07318	A07319	A07320
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	20 mL	250mL
Reporting Limit (RL)	20	20	20	20	250	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**11000**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**460**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	**2600**	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	**53**
Acetone	RL	RL	RL	RL	**1800**	**130**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**400**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**5300**	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**1800**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	**440**	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	**1200**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, January 9, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on 1/9

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 144 samples taken in and around ground zero on January 1 through January 6. EPA also sampled for asbestos at two additional lower Manhattan locations on January 3 and January 4. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,508, with 30 samples above the standard (27 of these were collected prior to September 30, the other three were collected on October 9, November 27 and December 27).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Public School 154 (33 East 135th St., Bronx), Intermediate School 143 (511 W. 182nd St., Manhattan), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 3 and January 4. None showed exceedances of the AHERA re-entry standard.

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from December 31 through January 5 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM10 - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from December 31 through January 5 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Particulate Monitoring - EPA used portable monitors to collect samples on January 8 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 8 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

Samples taken at the North Tower debris pile exceeded the OSHA standards for both benzene and 1,3-butadiene on January 8. All samples taken at EPA's Wash Tent (West St. and Murray), Austin Tobin Plaza and the South Tower debris pile showed no detectable levels of either benzene or 1,3-butadiene on January 8.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 8. Nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, January 9, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 1, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 2, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.
Note: Low sample volumes recorded.

NYC / ER (Jan 2, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
2 samples (Locations D-duplicate and T) were not collected due to equipment malfunctions.

NYC / ER (Jan 3, 0001 - 1200 hrs)

All 23 samples analyzed were below the TEM AHERA standard.
1 sample (Location D) was not collected due to an equipment malfunction.
Note: Totals include 2 samples collected from Location T on Dec 28 and Dec 29 that were previously not included with the results from those days.

NYC / ER (Jan 4, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access to that location was not available.

NYC / ER (Jan 5, 0001 - 1200 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
2 samples (Locations A and M1) were not collected due to equipment malfunctions.
1 location (Location T) was not sampled since access to that location was not available.

NYC / ER (Jan 5, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location I) was not collected due to an equipment malfunction.
2 locations (Locations C and C-duplicate) were not sampled since the pumps were missing.
1 location (Location T) was not sampled since access to that location was not available.

NYC / ER (Jan 6, 0001 - 1200 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
1 sample (Location A-duplicate) was not collected due to an equipment malfunction.
1 location (Location T) was not sampled since access to that location was not available.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 8) - Particulate Monitoring (Dataram)

No measurements taken due to weather conditions.

Ambient Air Sampling Locations

NYC / ER (Jan 3 - 4) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Dec 31) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***13.87 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.35 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***12.74 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Dec 31) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***20.52 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 1) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***8.87 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***8.33 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***11.19 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 1) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***20.08 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 2) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***10.51 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***9.75 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***11.74 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 2) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***26.36 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 3) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***12.17 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***14.19 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***13.87 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 3) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***30.11 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 4) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***9.75 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***9.70 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***14.71 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 4) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***36.13 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 5) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***16.41 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***14.05 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***15.47 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 5) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***27.58 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 8) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 1.9 to 146.8 ug/m^3 with an average of 13.2 ug/m^3.
Station N values ranged from 7.3 to 70.7 ug/m^3 with an average of 15.1 ug/m^3.
Station R values ranged from 0.0 to 110.8 ug/m^3 with an average of 14.1 ug/m^3.

NYC / ER (Jan 8) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
All 3 of the other samples (Washing Tent, Austin Tobin Plaza, and South Tower) did not note any benzene above the detection limit (20 ppbv).
1,3-Butadiene exceeded OSHA PEL (1 ppm) at one location (North Tower) on the debris pile in the plume at ground level.
All 3 of the other samples did not note any 1,3-Butadiene above the detection limit (20 ppbv).

Direct Reading Instruments

NYC / ER (Jan 8)

Nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/02/02 1200 to 2359

Data Validation Date: 01/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/02/02	RST-02732	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02733	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02734	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02735	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02736	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02737	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02738	A	720	Air	11.46	0.006	0	0	<8.89	<0.0048
01/02/02	RST-02739	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02740	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02741	H	701	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/02/02	RST-02742	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/02/02	RST-02743	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02744	D	488	Air	<7.0	<0.006	0	0	<8.00	<0.0063
01/02/02	-	D-Duplicate	NS	NS	NS	NS	NS	NS	NS	NS
01/02/02	RST-02745	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	-	T	NS	NS	NS	NS	NS	NS	NS	NS
01/02/02	RST-02746	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02747	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02748	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02749	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02750	P-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02751	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02752	W	672	Air	12.10	0.007	0	0	<8.00	<0.0046
01/03/02	FB010302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/03/02	TB010302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-02-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/02/02 0001 to 1200

Data Validation Date: 01/07/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/02/02	RST-02710	L	665	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/02/02	RST-02711	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02712	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02713	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02714	Q	282	Air	<7.0	<0.010	0	0	<8.00	<0.0109
01/02/02	RST-02715	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02716	A	252	Air	<7.0	<0.011	0	0	<8.00	<0.0122
01/02/02	RST-02717	C	267	Air	<7.0	<0.010	0	0	<8.00	<0.0115
01/02/02	RST-02718	B	681	Air	17.83	0.010	1***	0	8.00	0.0045
01/02/02	RST-02719	H	690	Air	7.64	0.004	0	0	<8.00	<0.0045
01/02/02	RST-02720	I	554	Air	<7.0	<0.005	0	0	<8.00	<0.0056
01/02/02	RST-02721	D	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/02/02	RST-02722	K	713	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02723	T	709	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02724	U	348	Air	<7.0	<0.008	0	0	<8.00	<0.0089
01/02/02	RST-02725	U-Duplicate	450	Air	<7.0	<0.006	0	0	<8.00	<0.0068
01/02/02	RST-02726	V	655	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/02/02	RST-02727	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02728	S-Duplicate	7 [a]	Air	<7.0	<0.385	0	0	<8.00	<0.4400
01/02/02	RST-02729	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02730	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02731	W	720	Air	19.11	0.010	0	0	<8.89	<0.0048
01/02/02	FB010202	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
01/02/02	TB010202	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]

Sampling Locations:
A: NE corner of West Broadway & Barclay
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H: South side of Chase Manhattan Plaza at Pine St.
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J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
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Key:
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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
[a] extremely low sample volume collected
NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
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NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-02-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/02/02 1200 to 2359

Data Validation Date: 01/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/02/02	RST-02732	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02733	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02734	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02735	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02736	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02737	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02738	A	720	Air	11.46	0.006	0	0	<8.89	<0.0048
01/02/02	RST-02739	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02740	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02741	H	701	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/02/02	RST-02742	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/02/02	RST-02743	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02744	D	488	Air	<7.0	<0.006	0	0	<8.00	<0.0063
01/02/02	-	D-Duplicate	NS	NS	NS	NS	NS	NS	NS	NS
01/02/02	RST-02745	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	-	T	NS	NS	NS	NS	NS	NS	NS	NS
01/02/02	RST-02746	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02747	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02748	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02749	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02750	P-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02751	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/02/02	RST-02752	W	672	Air	12.10	0.007	0	0	<8.00	<0.0046
01/03/02	FB010302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/03/02	TB010302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-02-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/03/02 0001 to 1200 [a]

Data Validation Date: 01/07/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/03/02	RST-02753	L	664	Air	<7.0	<0.004	0	0	<8.90	<0.0046
01/03/02	RST-02754	M1	720	Air	<7.0	<0.004	0	0	<8.39	<0.0048
01/03/02	RST-02755	N	613	Air	<7.0	<0.004	0	0	<8.99	<0.0056
01/03/02	RST-02756	J	720	Air	<7.0	<0.004	0	0	<8.39	<0.0048
01/03/02	RST-02757	Q	701	Air	9.55	0.005	0	0	<8.39	<0.0049
01/03/02	RST-02758	F	700	Air	<7.0	<0.004	0	0	<8.39	<0.0049
01/03/02	RST-02759	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02760	B	688	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/03/02	RST-02761	C	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/03/02	RST-02762	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02763	I	689	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/03/02	RST-02764	I-Duplicate	650	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/03/02	-	D	NS	NS	NS	NS	NS	NS	NS	NS
01/03/02	RST-02765	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02766	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02767	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02768	V	708	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02769	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02770	P	678	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/03/02	RST-02771	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/03/02	RST-02772	E-Duplicate	660	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/03/02	RST-02773	W	720	Air	7.64	0.004	0	0	<8.89	<0.0048
12/28/01	[a]RST-02774	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/29/01	[a]RST-02775	T	642	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/03/02	FB010302	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
01/03/02	TB010302	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]

Sampling Locations:

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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
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W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA[1] - Not analyzed due to overloading of particulates
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NR - Not requested
NS - Sample not submitted
[a] - Sample RST-02774 was collected 12/28/2001; Sample RST-02775 was collected 12/29/2001, due to access limitations and are not included on air sampling work sheets.

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-03-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/04/02 1200 to 2359

Data Validation Date: 01/07/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
01/04/02	RST-02817	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02818	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02819	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02820	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02821	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02822	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02823	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02824	F	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/04/02	RST-02825	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02826	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02827	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02828	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02829	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02830	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02831	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	-	T	NS	Air	NS	NS	NS	NS	NS	NS
01/04/02	RST-02832	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02833	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02834	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02835	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02836	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/04/02	RST-02837	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	FB010502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/05/02	TB010502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
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Key:

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** Structure (S) is roughly equivalent to fiber (f)
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**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-04-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/05/02 0001 to 1200

Data Validation Date: 01/07/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/05/02	RST-02838	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	-	M1	NS(1)	Air	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)
01/05/02	RST-02839	M1-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02840	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02841	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02842	J-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02843	Q	698	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/05/02	RST-02844	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	-	A	NS(1)	Air	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)	NS(1)
01/05/02	RST-02845	B	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/05/02	RST-02846	C	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/05/02	RST-02847	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02848	I	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/05/02	RST-02849	D	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02850	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	-	T	NS(2)	Air	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)	NS(2)
01/05/02	RST-02851	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02852	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02853	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02854	P	705	Air	7.64	0.004	0	0	<8.89	<0.0049
01/05/02	RST-02855	E	644	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/05/02	RST-02856	W	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/05/02	FB010502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/05/02	TB010502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Key:
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-05-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/05/02 1200 to 2359

Data Validation Date: 01/08/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/05/02	RST-02857	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02858	M1	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/05/02	RST-02859	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02860	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02861	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02862	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02863	F-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02864	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	-	C	NS	Air	NS	NS	NS	NS	NS	NS
01/05/02	-	C-Duplicate	NS	Air	NS	NS	NS	NS	NS	NS
01/05/02	RST-02865	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02866	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	-	I	NS	Air	NS	NS	NS	NS	NS	NS
01/05/02	RST-02867	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02868	K	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/05/02	RST-02869	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	RST-02870	V	688	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/05/02	RST-02871	S	303	Air	<7.0	<0.009	0	0	<8.00	<0.0102
01/05/02	RST-02872	P	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/05/02	RST-02873	E	631	Air	<7.0	<0.004	0	0	<8.00	<0.0049
01/05/02	RST-02874	W	720	Air	<7.0	<0.004	0	1***	8.89	0.0048
01/06/02	FB010602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/06/02	TB010602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-05-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/06/02 0001 to 1200

Data Validation Date: 01/08/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
01/06/02	RST-02875	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02876	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02877	N	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02878	J	674	Air	8.92	0.005	0	0	<8.00	<0.0046
01/06/02	RST-02879	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02880	F	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/06/02	RST-02881	A	720	Air	11.46	0.006	0	0	<8.89	<0.0048
01/06/02	-	A-Duplicate	NS	Air	NS	NS	NS	NS	NS	NS
01/06/02	RST-02882	C	720	Air	12.10	0.006	0	0	<8.89	<0.0048
01/06/02	RST-02883	B	387	Air	<7.0	<0.007	0	0	<8.00	<0.0080
01/06/02	RST-02884	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02885	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02886	I	664	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/06/02	RST-02887	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02888	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02889	U	717	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02890	V	325	Air	<7.0	<0.008	0	0	<8.89	<0.0105
01/06/02	RST-02891	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02892	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02893	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02894	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	FB010602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/06/02	TB010602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
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Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
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W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-06-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/03/02 1200 to 2400

Data Validation Date: 01/07/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc*
01/03/02	7093-18-0098	Park Row	1360	Air	<7.0	<0.002	0	0	<16.00	<0.0045
01/03/02	7093-19-0098	Chambers Street	1350	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/03/02	7093-15-0096	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/03/02	7094-09-0087	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/03/02	7096-12-0092	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/03/02	7095-98-0092	Brooklyn PS #274	1262	Air	7.01	0.002	0	0	<16.00	<0.0049
01/03/02	7097-18-0089	Staten Island PS #44	1344	Air	<7.0	<0.002	0	0	<16.00	<0.0046

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-01-03-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/04/02 1200 to 2400

Data Validation Date: 01/07/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/04/02	7093-18-0099	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/04/02	7093-19-0099	Chambers Street	1404	Air	7.64	0.002	0	0	<16.00	<0.0044
01/04/02	7093-15-0097	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/04/02	7094-09-0088	Bronx PS #154	1284	Air	<7.0	<0.002	0	0	<16.00	<0.0048
01/04/02	7096-12-0093	Queens PS #199	854***	Air	<7.0	<0.003	0	0	<10.00	<0.0045
01/04/02	7095-98-0093	Brooklyn PS #274	1320	Air	<7.0	<0.002	0	0	<16.00	<0.0047
01/04/02	7097-18-0090	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-04-02pm.xls

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: J. Patrick Chan

U.S. EPA: Norrell

Date: 11/8/02

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2646	2647	2607			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	7:48	7:50	~~[illegible]~~ 0807			
Stop Time	13:49	13:52	13:54			
Run Time (Minutes)	~~347~~ 361 P.C.	362	347			
Minimum Concentration (ug/m3)	0.0	1.9	7.3			
Maximum Concentration (ug/m3)	110.8	146.8	70.7			
Average Concentration (TWA) (ug/m3)	14.1	13.2	15.1			

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/8/02 (EMLY) RST: BRENNAN

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0755	*	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M1	0805		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
N	0810		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
J	0820		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
Q	0825		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
F	0830		ND	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
A	0845		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
C	0850		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
B	0855		ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
H	0905		ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
I	0910		ND	ND	21.1	6	ND	ND	ND	ND	ND	ND	ND
D	0920		ND	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
K	0925		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
T	0935		ND	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
U	0940		ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
V	0945		ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
S	1010		ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
P	1015		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
E	1025		ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND

* FID WAS NOT LIGHT — HCl, HF, $COCl_2$ – SPM

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-8-02 (Late) RST: Brennan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1205	*	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
M1	1210		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
N	1215		ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
J	1220		ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
Q	1225		ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
F	1227		ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
A	1230		ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
C	1233		ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
B	1235		ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
H	1240		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
I	1245		ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
D	1252		ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
K	1255		ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
T	1300		ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
U	1302		ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
V	1305		ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
S	1315		ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	**
P	1318		ND	ND	21.2	7	ND	ND	ND	ND	ND	ND	↓
E	1321	↓	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	↓

* FID WOULD NOT LIGHT
** BATTERY DEAD

HCl, HF, $COCl_2$ - 3/2.49

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
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Location L: Stuyvesant High School
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Location O: No location
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Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/08/02

File Name	NYC708	NYC709	NYC710	NYC711	NYC713	NYC712
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07321	A07324	A07322	A07323
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	20 mL	250mL
Reporting Limit (RL)	20	20	20	20	250	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**17000**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**590**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	**4300**	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**21000**	**25**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**31**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**800**	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**7700**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**4600**	RL
Heptane	RL	RL	RL	RL	**630**	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**3500**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	**500**	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**1200**	RL
m&p-Xylenes	RL	RL	RL	RL	**830**	RL
o-Xylene	RL	RL	RL	RL	**560**	RL
Styrene	RL	RL	RL	RL	**7400**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	**270**	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, January 10, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 8:30 a.m. on 1/11

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 42 samples taken in and around ground zero on January 6 and 7. EPA also sampled for asbestos at two additional lower Manhattan locations on January 5. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,552, with 30 samples above the standard (27 of these were collected prior to September 30, the other three were collected on October 9, November 27 and December 27).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 5. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - Thirty-three air samples collected on January 8 and 9 were analyzed for asbestos. All were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 8 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 9 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 9 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either did not exceed OSHA standards, or showed no detectable levels, of either benzene or 1,3-butadiene on January 9.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 9. Nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, January 10, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 6, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
2 samples (Locations D and Q) were not collected due to equipment malfunctions.
A sample was not submitted to the lab for Location T since access to that location was not available.
Note: Totals include 2 samples collected from Location T on Jan 4 (1200 - 2359hrs) and Jan 5 (0001 - 1200hrs) that were previously not included with the results from those days.
Note: Low sample volume recorded.

NYC / ER (Jan 7, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
A sample was not submitted to the lab for Location T since access to that location was not available.
Note: Low sample volumes recorded.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 5, 0753 - 2131 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
2 samples (Location B-14 and O-19) were not collected due to equipment malfunction.
2 locations (Locations P-1 and W-11) were not analyzed due to overloading of particulates.
Note: The results for Location T-16 indicate a total of 2 structures identified for the '0.5u - 5u' size classification. One of the structures was chrysotile, the other was tremolite.

Fresh Kills (Jan 6, 0740 - Jan 7, 0108 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-2) was not collected due to equipment malfunction.

Fresh Kills (Jan 8) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-6, and P-8) based on daily average concentrations.
Note: Previously reported in the December 9 Sampling Situation Report that there were no measurements taken on January 8 due to the weather conditions. The date should have actually been January 7.

Ambient Air Sampling Locations

NYC / ER (Jan 5) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 6 samples were collected from these monitoring sites.
A sample was not collected from Site 5 since access to that location was not available.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 9) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 1½ to 2 hours due to the weather conditions.
Station L values ranged from 35.3 to 217.0 ug/m^3 with an average of 51.5 ug/m^3.
Station N values ranged from 0.0 to 205.8 ug/m^3 with an average of 50.7 ug/m^3.
Station R values ranged from 28.0 to 128.7 ug/m^3 with an average of 42.0 ug/m^3.

NYC / ER (Jan 9) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, and South Tower), including in the debris area at ground level.
1,3-Butadiene was not detected in any of the samples above the detection limit (20 ppbv).

Direct Reading Instruments

NYC / ER (Jan 9)

Nothing of significance reported in the limited monitoring conducted.
Monitoring impacted by weather conditions.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/06/02 1200 to 2359

Data Validation Date: 01/09/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S-f/cc**
01/06/02	RST-02895	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02896	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02897	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02898	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02899	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	-	Q	NS	Air	NS	NS	NS	NS	NS	NS
01/06/02	RST-02900	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02901	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02902	C	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/06/02	RST-02903	B	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/06/02	RST-02904	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02905	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	-	D	NS	Air	NS	NS	NS	NS	NS	NS
01/06/02	RST-02906	D-Duplicate	720	Air	11.46	0.006	0	0	<8.89	<0.0048
01/06/02	RST-02907	K	687	Air	8.92	0.005	0	0	<8.00	<0.0045
01/06/02	RST-02908	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02909	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02910	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02911	P	290	Air	<7.0	<0.009	0	0	<8.00	<0.0106
01/06/02	RST-02912	E	421	Air	<7.0	<0.006	0	0	<8.00	<0.0073
01/04/02	(a) RST-02913	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/05/02	(a) RST-02914	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/06/02	RST-02915	W	524	Air	7.01	0.005	0	0	<8.00	<0.0059
01/07/02	FB010702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/07/02	TB010702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Key:

* Sample volume (liters) is below recommended limit for the TEM method: volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

(a) Sample RST-02913 was collected 01-04-02, 1200-2359 and sample RST-02914 was collected 01-05-02, 0001-1200.

FL-01-06-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/07/02 0001 to 1200

Data Validation Date: 01/09/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S-f/cc**
01/07/02	RST-02916	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02917	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02918	M1-Duplicate	[a] 16	Air	<7.0	<0.169	0	0	<8.00	<0.1925
01/07/02	RST-02919	N	[a] 169	Air	<7.0	<0.016	0	0	<8.00	<0.0182
01/07/02	RST-02920	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02921	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02922	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02923	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02924	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02925	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02926	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02927	I	720	Air	12.74	0.007	0	0	<8.89	<0.0048
01/07/02	RST-02928	D	720	Air	26.75	0.014	0	0	<8.89	<0.0048
01/07/02	RST-02929	K	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/07/02	RST-02930	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02931	U-Duplicate	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/07/02	RST-02932	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02933	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02934	P	540	Air	15.29	0.011	0	0	<8.00	<0.0057
01/07/02	RST-02935	E	345	Air	<7.0	<0.008	0	0	<8.00	<0.0089
01/07/02	RST-02936	W	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/07/02	FB010702	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
01/07/02	TB010702	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]

Sampling Locations:
A: NE corner of West Broadway & Barclay
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
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R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
[a] extremely low sample volume collected
NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
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FL-01-07-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/05/02 0753 to 2131

Data Validation Date: 1/09/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/05/02	LF01982	P-1	720	Air	<7.0	<0.004	NA(1)	NA(1)	NA(1)	NA(1)
01/05/02	LF01983	P-2	420	Air	<7.0	<0.006	1***	0	7.87	0.0072
01/05/02	LF01984	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/05/02	LF01985	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/05/02	LF01986	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/05/02	LF01987	P-6	556	Air	<7.0	<0.005	0	0	<7.87	<0.0055
01/05/02	LF01988	P-7	706	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/05/02	LF01989	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/05/02	LF01990	W-11	720	Air	15.29	0.008	NA(1)	NA(1)	NA(1)	NA(1)
01/05/02	LF01991	W-12A	720	Air	20.38	0.011	0	0	<8.75	<0.0047
01/05/02	LF01992	W-12B	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/05/02	LF01993	B-13	720	Air	<7.0	<0.004	0	1***	8.75	0.0047
01/05/02	LF01994	B-14	NS	Air	NS	NS	NS	NS	NS	NS
01/05/02	LF01995	T-15	720	Air	24.2	0.013	0	1***	8.75	0.0047
01/05/02	LF01996	T-16	720	Air	<7.0	<0.004	1***1****	0	17.50	0.0094
01/05/02	LF01997	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/05/02	LF01998	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/05/02	LF01999	O-19	NS	Air	NS	NS	NS	NS	NS	NS
01/05/02	LF02000	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/05/02	LF02001	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/05/02	LF02002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-05-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/06/02 0740 to 01/07/02 0108

Data Validation Date: 01/09/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm^2	f/cc	Structures (#) 0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/06/02	LF02003	P-1	717	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02004	P-2	NS	Air	NS	NS	NS	NS	NS	NS
01/06/02	LF02005	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02006	P-4	706	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/06/02	LF02007	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02008	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02009	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02010	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02011	W-11	720	Air	NA(1)	NA(1)	0	0	<8.75	<0.0047
01/06/02	LF02012	W-12A	720	Air	49.68	0.027	1***	1***	17.50	0.0094
01/06/02	LF02013	W-12B	720	Air	11.46	0.006	1***	0	8.75	0.0047
01/06/02	LF02014	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02015	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02016	T-15	720	Air	22.93	0.012	0	0	<8.75	<0.0047
01/06/02	LF02017	T-16	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/06/02	LF02018	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02019	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02020	O-19	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/06/02	LF02021	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/06/02	LF02022	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/06/02	LF02023	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-06-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/05/02 1200 to 2400

Data Validation Date: 01/09/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
01/05/02	7093-18-0100	Park Row	1440	Air	<7.0	<0.002	1****	0	16	0.0043
01/05/02	7093-19-0100	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/05/02	7093-15-0098	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/05/02	7094-09-	Bronx PS #154	NS	Air	NS	NS	NS	NS	NS	NS
01/05/02	7096-12-0094	Queens PS #199	1370	Air	<7.0	<0.002	0	0	<16.00	<0.0045
01/05/02	7095-98-0094	Brooklyn PS #274	1264	Air	<7.0	<0.002	0	0	<16.00	<0.0049
01/05/02	7097-18-0091	Staten Island PS #44	1412	Air	<7.0	<0.002	0	0	<16.00	<0.0044

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted due to no access to station location
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-05-02pm.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 8, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	18	04:30:00	10	00:15:00	100	0.0	0.5	9.6	152.3
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	16	04:00:00	10	00:15:00	100	0.0	0.0	14.3	103.7
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	19	04:45:00	10	00:15:00	100	0.0	0.7	6.8	15.7

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/09/02

File Name	NYC718	NYC719	NYC720	NYC721	NYC724	NYC722
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07325	A07327	A07326	A07328
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**84**	**42**
Chlorodifluoromethane	RL	RL	RL	RL	**25**	RL
Dichlorodifluoromethane	RL	RL	RL	RL	**180**	**26**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	**100**	RL
Isopropyl Alcohol	RL	RL	RL	RL	**75**	RL
Acetone	RL	RL	RL	RL	**1400**	**34**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	**21**	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	**87**	**160**
MTBE	RL	RL	RL	RL	**29**	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**22**	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**120**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	**33**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	**68**	RL
Cyclohexane	RL	RL	RL	RL	**32**	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**38**	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	**390**	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	**22**	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**100**	**39**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**32**	RL
m&p-Xylenes	RL	RL	RL	RL	**96**	RL
0-Xylene	RL	RL	RL	RL	**44**	RL
Styrene	RL	RL	RL	RL	**55**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	**28**	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: J. Brennan

U.S. EPA: Norrell

Date: 1-9-02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2647	2646	2667			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0757	0801	0816			
Stop Time	0951*	0954*	0959*			
Run Time (Minutes)	113	112	98			
Minimum Concentration (ug/m3)	28.0 ~~42.0~~	35.3	0.0			
Maximum Concentration (ug/m3)	1287	217.0	205.8			
Average Concentration (TWA) (ug/m3)	42.0	51.5	50.7			

* Air Monitoring halted early due to rain

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-4-02 (Early) RST: J. Brennan

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0815	*	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M1	0825		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	0820		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
J	0825		ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
Q	0830		ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
F	0835		0.2	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
A	0855		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
C	0905		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
B	0910		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
H	0920		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
I	0925		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
D	0935		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
K	0940		0.1	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
AIR MONITORING STOPPED DUE TO SLEET / RAIN													

* FID WILD NOT LIGHT

HCl, HF, $COCl_2$ - SPM

Location A: Barclay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, January 11, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 6:30 p.m. on 1/11

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from asbestos monitors at Public School 154 (33 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 6. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - Thirty-four air samples collected on January 7 and 8 were analyzed for asbestos. All were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 10 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 10 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 10 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either did not exceed OSHA standards, or showed no detectable levels, of either benzene or 1,3-butadiene on January 10.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 10. Nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, January 11, 2002

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 7, 0758 - 2200 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
2 samples (Locations B-13 and O-19) were not collected due to equipment malfunctions.
1 location (Location W-11) was not analyzed due to overloading of particulates.
1 location (Location O-18) was not analyzed due to a wet/damaged filter.

Fresh Kills (Jan 8, 0815 - 2244 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Dec 10) - Metals

5 samples collected (Locations O-17, O-18, O-19, P-5, and P-8).
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills (Dec 15) - Metals

5 samples collected (Locations O-17, O-18, O-19, P-5, and P-8).
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills (Dec 19) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: QA/QC review of chromium in air analytical data has revealed that chromium is not present in these samples.

Fresh Kills (Dec 21) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: QA/QC review of chromium in air analytical data has revealed that chromium is not present in these samples.

Fresh Kills (Jan 9) - Particulate Monitoring (Dataram)

No measurements taken due to the weather conditions.

Fresh Kills (Jan 10) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Dec 3) - Volatile Organic Compounds

5 (Summa) samples collected over a period of approximately 8 hours.
4 work-zone locations, several at or near the perimeter (South Tower - South Side, North Tower - West Side, North Tower - North Side), and one at Austin Tobin Plaza.
1 ambient location at Location R.
All samples collected in the breathing zone.
VOCs in all 4 work-zone samples were either not detected or were below applicable OSHA PELs. As a further point of comparison, since several locations are at or near the perimeter, the results were all below EPA Removal Action level guidelines.
VOCs at Location R were either not detected or below the EPA Removal Action level guidelines (based on a 30-year exposure).
VOC concentrations in the work zone, including those at or near the perimeter, are significantly reduced as compared to results from daily grab samples collected on the debris pile in the plume at ground level.
Note: These breathing zone samples are influenced by ambient conditions and vehicular emissions over a period of approximately 8 hours as compared to the TAGA/mobile laboratory samples which are ground level plume samples in the debris collected over a period of one minute.
Note: Data will be included in a subsequent report.

NYC / ER (Dec 10) - Volatile Organic Compounds

5 (Summa) samples collected over a period of approximately 8 hours.
4 work-zone locations, several at or near the perimeter (South Tower - South Side, South Tower - Southwest Side, North Tower - Northwest Side), and one at Austin Tobin Plaza.
1 ambient location at Location R.
All samples collected in the breathing zone.
VOCs in all 4 work-zone samples were either not detected or were below applicable OSHA PELs. As a further point of comparison, since several locations are at or near the perimeter, the results were all below EPA Removal Action level guidelines.
1,1,2,2-Tetrachloroethane exceeded the EPA Removal Action level guidelines (based on a 30-year exposure) at Location R. Note: RAL is 0.45 ppbv.
1,1,2,2-Tetrachloroethane did not exceed the EPA Removal Action level guidelines adjusted to a 1-year exposure duration.
All other VOCs at Location R were either not detected or below the EPA Removal Action level guidelines (based on a 30-year exposure).
Wind conditions at the time of this sampling event place Location R upwind of the WTC work zone.
VOC concentrations in the work zone, including those at or near the perimeter, are significantly reduced as compared to results from daily grab samples collected on the debris pile in the plume at ground level.
Note: These breathing zone samples are influenced by ambient conditions and vehicular emissions over a period of 8 hours as compared to the TAGA/mobile

laboratory samples which are ground level plume samples in the debris collected over a period of one minute.

NYC / ER (Dec 17) - Volatile Organic Compounds

5 (Summa) samples collected over a period of approximately 8 hours.
4 work-zone locations, several at or near the perimeter (South Tower - South Side (aka: South), South Tower - Southwest Side (aka: SW Corner), North Tower - Northwest Side (aka: NW Corner)), and one at Austin Tobin Plaza (aka: East).
1 ambient location at Location R.
All samples collected in the breathing zone.
VOCs in all 4 work-zone samples were either not detected or were below applicable OSHA PELs. As a further point of comparison, since several locations are at or near the perimeter, the results were all below EPA Removal Action level guidelines.
VOCs at Location R were either not detected or below the EPA Removal Action level guidelines (based on a 30-year exposure).
VOC concentrations in the work zone, including those at or near the perimeter, are significantly reduced as compared to results from daily grab samples collected on the debris pile in the plume at ground level.
Note: These breathing zone samples are influenced by ambient conditions and vehicular emissions over a period of approximately 8 hours as compared to the TAGA/mobile laboratory samples which are ground level plume samples in the debris collected over a period of one minute.

NYC / ER (Dec 4) - Dioxin

All 10 samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

NYC / ER (Dec 6) - Dioxin

All 10 samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

NYC / ER (Dec 11) - Dioxin

All 10 samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

NYC / ER (Dec 11) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: QA/QC review of chromium in air analytical data has revealed that chromium is not present in these samples.

NYC / ER (Dec 19) - Metals

10 samples collected.
Arsenic nominally exceeded the EPA Removal Action level guidelines (based on a 30-year exposure) at Location B. Note: RAL is 0.041 ug/m^3.
The arsenic concentration at Location B was below the EPA Removal Action level guidelines adjusted to 1-year exposure, and the NIOSH REL (2 ug/m^3) and OSHA PEL (10 ug/m^3).
All other metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: QA/QC review of chromium in air analytical data has revealed that chromium is not present in these samples.

NYC / ER (Dec 6) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Dec 11) - PCBs

Trace amounts detected in 1 of 10 samples well below levels of concern.
Concentration detected was below the EPA Removal Action level guidelines.
9 samples analyzed did not detect any PCBs.

NYC / ER (Dec 19) - PCBs

Trace amounts detected in 1 of 10 samples well below levels of concern.
Concentration detected was below the EPA Removal Action level guidelines.
9 samples analyzed did not detect any PCBs.

NYC / ER (Dec 19) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Jan 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 6 samples were collected from these monitoring sites.
A sample was not collected from Site 6 due to an equipment malfunction.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 10) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6½ hours.
Station L values ranged from 0.0 to 171.7 ug/m^3 with an average of 41.6 ug/m^3.
Station N values ranged from 0.3 to 78.6 ug/m^3 with an average of 33.8 ug/m^3.
Station R values ranged from 0.0 to 98.0 ug/m^3 with an average of 34.9 ug/m^3.

NYC / ER (Jan 10) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, and South Tower), including in the debris area at ground level.

Direct Reading Instruments

NYC / ER (Jan 10)

Low levels of carbon monoxide noted at nearly all stations during the afternoon monitoring period.
Otherwise, nothing of significance reported.

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/07/02 0758 to 2200

Data Validation Date: 01/10/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/07/02	LF02024	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/07/02	LF02025	P-2	597	Air	<7.0	<0.005	0	0	<8.75	<0.0056
01/07/02	LF02026	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/07/02	LF02027	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/07/02	LF02028	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/07/02	LF02029	P-6	540	Air	<7.0	<0.005	0	0	<8.75	<0.0062
01/07/02	LF02030	P-7	648	Air	<7.0	<0.004	0	0	<8.75	<0.0052
01/07/02	LF02031	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/07/02	LF02032	W-11	720	Air	NA(1)	NA(1)	NA(1)	NA(1)	NA(1)	NA(1)
01/07/02	LF02033	W-12A	720	Air	15.29	0.008	1***	1***	17.50	0.0094
01/07/02	LF02034	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/07/02	LF02035	B-13	NS	Air	NS	NS	NS	NS	NS	NS
01/07/02	LF02036	B-14	720	Air	<7.0	<0.004	0	0	<7.87	<0.0042
01/07/02	LF02037	T-15	720	Air	15.29	0.008	0	0	<7.87	<0.0042
01/07/02	LF02038	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/07/02	LF02039	O-17	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/07/02	LF02040	O-18	225	Air	NA(3)	NA(3)	NA(3)	NA(3)	NA(3)	NA(3)
01/07/02	LF02041	O-19	NS	Air	NS	NS	NS	NS	NS	NS
01/07/02	LF02042	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/07/02	LF02043	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/07/02	LF02044	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
NA(3) - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-07-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/08/02 0815 to 2244

Data Validation Date: 01/10/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/08/02	LF02045	P-1	674	Air	<7.0	<0.004	0	0	<8.75	<0.0050
01/08/02	LF02046	P-2	683	Air	<7.0	<0.004	0	0	<8.75	<0.0049
01/08/02	LF02047	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02048	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02049	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02050	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02051	P-7	712	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02052	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02053	W-11	720	Air	19.11	0.010	0	0	<8.75	<0.0047
01/08/02	LF02054	W-12A	720	Air	19.11	0.010	1***	1***	17.50	0.0094
01/08/02	LF02055	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02056	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02057	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02058	T-15	720	Air	15.29	0.008	1***	0	8.75	0.0047
01/08/02	LF02059	T-16	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/08/02	LF02060	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02061	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02062	O-19	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/08/02	LF02063	MPHS-20	712	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/08/02	LF02064	Lot Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)
01/08/02	LF02065	Trip Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-08-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/06/02 1200 to 2229 and 01/05/02 1200 to 2400

Data Validation Date: 01/10/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc*
01/06/02	7093-18-0101	Park Row	1202	Air	<7.0	<0.002	0	0	<13.33	<0.0043
01/06/02	7093-19-0101	Chambers Street	1258	Air	<7.0	<0.002	0	0	<13.33	<0.0041
01/06/02	7093-15-0099	Manhattan IS #143	NS	Air	NS	NS	NS	NS	NS	NS
01/05/02	7094-09-0089	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/06/02	7096-12-0095	Queens PS #199	840***	Air	<7.0	<0.003	0	0	<10.00	<0.0046
01/06/02	7095-98-0095	Brooklyn PS #274	810***	Air	<7.0	<0.003	0	0	<10.00	<0.0048
01/06/02	7097-18-0092	Staten Island PS #44	910***	Air	<7.0	<0.003	0	0	<11.43	<0.0048

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 10, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	41	10:15:00	10	00:15:00	100	0.0	7.7	27.9	150.2
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	40	10:00:00	10	00:15:00	100	0.0	20.2	33.3	103.2
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	40	10:00:00	10	00:15:00	100	0.0	13.0	24.8	65.0

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0020		WTC-0021		WTC-0015	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		4833	
Date Collected		-		-		-		12/10/01		12/10/01		12/10/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.28	0.26
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.037	0.026
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Calcium	ICAP	4.1	2.5	4.1	2.5	4.0	2.5	U	2.5	U	2.5	1.8	0.52
Chromium	ICAP	0.73	0.13	0.81	0.13	0.69	0.13	U	0.13	U	0.13	U	0.026
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.90	0.13
Lead	AA-Fur	0.055	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.20	0.052

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		WTC-0016		WTC-0017		WTC-0018		WTC-0019	
Location		P-8		O-19		O-18		O-17	
Air Volume (L)		4480		4365		4420		4770	
Date Collected		12/10/01		12/10/01		12/10/01		12/10/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.28	U	0.29	U	0.28	U	0.26
Antimony	AA-Fur	U	0.011	U	0.011	U	0.011	U	0.01
Arsenic	AA-Fur	U	0.011	U	0.012	U	0.011	U	0.011
Barium	ICAP	U	0.028	0.029	0.029	0.034	0.028	U	0.026
Beryllium	ICAP	U	0.011	U	0.011	U	0.011	U	0.01
Cadmium	ICAP	U	0.028	U	0.029	U	0.028	U	0.026
Calcium	ICAP	0.65	0.56	0.91	0.57	0.89	0.57	0.59	0.52
Chromium	ICAP	U	0.028	U	0.029	U	0.028	U	0.026
Cobalt	ICAP	U	0.056	U	0.057	U	0.057	U	0.052
Copper	ICAP	U	0.056	U	0.057	U	0.057	U	0.052
Iron	ICAP	0.41	0.14	0.56	0.14	0.55	0.14	0.35	0.13
Lead	AA-Fur	U	0.011	U	0.012	0.012	0.011	U	0.011
Magnesium	ICAP	U	2.8	U	2.9	U	2.8	U	2.6
Manganese	ICAP	U	0.028	U	0.029	U	0.028	U	0.026
Nickel	ICAP	U	0.056	0.27	0.057	U	0.057	U	0.052
Potassium	ICAP	U	11	U	11	U	11	U	10
Selenium	AA-Fur	U	0.011	U	0.012	U	0.011	U	0.011
Silver	ICAP	U	0.028	U	0.029	U	0.028	U	0.026
Sodium	ICAP	U	2.8	U	2.9	U	2.8	U	2.6
Thallium	AA-Fur	U	0.011	U	0.012	U	0.011	U	0.011
Vanadium	ICAP	U	0.056	U	0.057	U	0.057	U	0.052
Zinc	ICAP	0.12	0.056	0.14	0.057	0.15	0.057	0.11	0.052

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		05903		05904		05881	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		TAGA	
Air Volume (L)		-		-		-		0		0		4290	
Date Collected		-		-		-		12/11/01		12/11/01		12/11/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.54	0.29
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.012	0.012
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.012
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.051	0.029
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.012
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.029
Calcium	ICAP	4.1	2.5	4.1	2.5	4.0	2.5	U	2.5	U	2.5	1.7	0.58
Chromium	ICAP	0.73	0.13	0.81	0.13	0.69	0.13	U	0.13	0.13	0.13	U	0.029
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.058
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.058
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.98	0.15
Lead	AA-Fur	0.055	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.02	0.012
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.9
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.029
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.058
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	12
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.012
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.029
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	3.7	2.9
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.012
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.058
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.18	0.058

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		05882		05883		05884		05885		05886		05887	
Location		TAGA		A-BARCLAY ST. & WEST BROADWAY		LOC 3B CHURCH & VESEY ST		B-CHURCH & DEY ST.		C -LIBERTY ST. & CHURCH		D-GREENWICH & ALBANY ST.	
Air Volume (L)		4800		4800		4800		4290		4800		4520	
Date Collected		12/11/01		12/11/01		12/11/01		12/11/01		12/11/01		12/11/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.30	0.26	1.0	0.26	0.73	0.26	0.98	0.29	0.67	0.26	0.86	0.28
Antimony	AA-Fur	0.013	0.01	0.016	0.01	0.016	0.01	0.019	0.012	0.017	0.01	0.029	0.011
Arsenic	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.012	U	0.01	0.017	0.011
Barium	ICAP	0.046	0.026	0.091	0.026	0.074	0.026	0.11	0.029	0.069	0.026	0.13	0.028
Beryllium	ICAP	U	0.01	U	0.01	U	0.01	U	0.012	U	0.01	U	0.011
Cadmium	ICAP	U	0.026	U	0.026	U	0.026	U	0.029	U	0.026	U	0.028
Calcium	ICAP	1.5	0.52	7.4	0.52	6.4	0.52	9.7	0.58	6.1	0.52	8.0	0.55
Chromium	ICAP	U	0.026	U	0.026	0.05	0.026	0.03	0.029	U	0.026	U	0.028
Cobalt	ICAP	U	0.052	U	0.052	U	0.052	U	0.058	U	0.052	U	0.055
Copper	ICAP	U	0.052	0.085	0.052	0.096	0.052	0.15	0.058	0.22	0.052	0.32	0.055
Iron	ICAP	0.87	0.13	3.5	0.13	4.2	0.13	8.1	0.15	6.4	0.13	12	0.14
Lead	AA-Fur	0.033	0.01	0.062	0.01	0.062	0.01	0.09	0.012	0.089	0.01	0.19	0.011
Magnesium	ICAP	U	2.6	U	2.6	U	2.6	U	2.9	U	2.6	U	2.8
Manganese	ICAP	U	0.026	0.056	0.026	0.058	0.026	0.17	0.029	0.092	0.026	0.17	0.028
Nickel	ICAP	0.059	0.052	0.085	0.052	0.072	0.052	0.10	0.058	0.089	0.052	0.11	0.055
Potassium	ICAP	U	10	U	10	U	10	U	12	U	10	U	11
Selenium	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.012	U	0.01	U	0.011
Silver	ICAP	U	0.026	U	0.026	U	0.026	U	0.029	U	0.026	U	0.028
Sodium	ICAP	3.5	2.6	U	2.6	U	2.6	U	2.9	U	2.6	3.9	2.8
Thallium	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.012	U	0.01	U	0.011
Vanadium	ICAP	U	0.052	U	0.052	U	0.052	U	0.058	U	0.052	U	0.055
Zinc	ICAP	0.20	0.052	0.35	0.052	0.42	0.052	0.59	0.058	0.52	0.052	1.6	0.055

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		05888		05889		05890	
Location		P-ALBANY ST. & SOUTHEND		S-RECTOR PLACE & SOUTHEND		E-LIBERTY ST. & SOUTHEND	
Air Volume (L)		4670		4820		4730	
Date Collected		12/11/01		12/11/01		12/11/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.60	0.27	0.38	0.26	0.53	0.26
Antimony	AA-Fur	0.015	0.011	0.012	0.01	0.014	0.011
Arsenic	AA-Fur	U	0.011	U	0.01	U	0.011
Barium	ICAP	0.067	0.027	0.06	0.026	0.055	0.026
Beryllium	ICAP	U	0.011	U	0.01	U	0.011
Cadmium	ICAP	U	0.027	U	0.026	U	0.026
Calcium	ICAP	4.8	0.54	2.8	0.52	4.9	0.53
Chromium	ICAP	U	0.027	U	0.026	U	0.026
Cobalt	ICAP	U	0.054	U	0.052	U	0.053
Copper	ICAP	0.077	0.054	0.054	0.052	0.068	0.053
Iron	ICAP	3.0	0.13	1.8	0.13	2.5	0.13
Lead	AA-Fur	0.043	0.011	0.026	0.01	0.037	0.011
Magnesium	ICAP	U	2.7	U	2.6	U	2.6
Manganese	ICAP	0.042	0.027	U	0.026	0.038	0.026
Nickel	ICAP	0.063	0.054	U	0.052	0.074	0.053
Potassium	ICAP	U	11	U	10	U	11
Selenium	AA-Fur	U	0.011	U	0.01	U	0.011
Silver	ICAP	U	0.027	U	0.026	U	0.026
Sodium	ICAP	2.9	2.7	2.8	2.6	2.7	2.6
Thallium	AA-Fur	U	0.011	U	0.01	U	0.011
Vanadium	ICAP	U	0.054	U	0.052	U	0.053
Zinc	ICAP	0.28	0.054	0.22	0.052	0.29	0.053

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/11/01

Sample No.	WG-6353-1P		05871		05872		05873		05874		05875		05876	
Sampling Location	Method Blank		R		R		A		3B		B		C	
Sample Volume (L)	0		6600		6825		6765		7200		7200		7200	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DcCB	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Sum of MoCBs	U	10.0	U	1.52	U	1.47	U	1.48	1.43	1.39	U	1.39	U	1.39
Sum of DiCBs	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Sum of TrCBs	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Sum of TeCBs	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Sum of PeCBs	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Sum of HxCBs	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Sum of HpCBs	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Sum of OcCBs	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Sum of NoCBs	U	10.0	U	1.52	U	1.47	U	1.48	U	1.39	U	1.39	U	1.39
Total	0		0		0		0		1.43		0		0	

COC# 19858

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 12/27/01

12-11-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/11/01

Sample No.	05877		05878		05879		05880		05901		05902	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7200		6825		7230		7245		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of MoCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of DiCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of TrCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of TeCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of PeCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of HxCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of HpCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of OcCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Sum of NoCBs	U	1.39	U	1.47	U	1.38	U	1.38	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 19858

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/06/01

Sample No.	WG-6343-1P		11371		11372		11373		11374		11375		11376	
Sampling Location	Method Blank		R		R		A		3B		B		C	
Sample Volume (L)	0		7455		7455		7425		7455		7455		7500	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of MoCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of DiCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of TrCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of TeCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of PeCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of HxCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of HpCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of OcCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Sum of NoCBs	U	10.0	U	1.34	U	1.34	U	1.35	U	1.34	U	1.34	U	1.33
Total	0		0		0		0		0		0		0	

COC# 04370

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 12/27/01

12-06-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/06/01

Sample No.	11377		11378		11379		11380		11381		11382	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7515		7305		7545		7125		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of MoCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of DiCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of TrCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of TeCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of PeCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of HxCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of HpCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of OcCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Sum of NoCBs	U	1.33	U	1.37	U	1.33	U	1.40	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 04370

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/04/01

Sample No.	WG6338-1			05671			05672			05673			05674			05675			05676		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			6780			7245			6960			7200			6815			7230		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0030	U		0.0028	U		0.0029	U		0.0028	U		0.0029	U		0.0028
12378-PeCDD	U	0.001	0.10	U		0.015	U	0.0002	0.014	U		0.014	U	0.0003	0.014	U		0.015	U		0.014
123478-HxCDD	U		0.10	U		0.015	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014
123678-HxCDD	U	0.0054	0.10	U		0.015	U	0.0006	0.014	U		0.014	0.0007 J		0.014	U		0.015	U	0.0006	0.014
123789-HxCDD	U		0.10	U		0.015	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014
1234678-HpCDD	0.0052 J		0.10	0.0010 J		0.015	0.0009 J		0.014	0.0015 J		0.014	0.0017 J		0.014	0.0016 J		0.015	0.0014 J		0.014
OCDD	U	0.0354	0.20	U		0.030	U		0.028	U		0.029	U		0.028	U		0.029	U		0.028
2378-TCDF	U		0.020	U		0.0030	U		0.0028	0.0006J		0.0029	U	0.0006	0.0028	U	0.0005	0.0029	0.0005 J		0.0028
12378-PeCDF	U		0.10	U		0.015	U		0.014	U	0.0003	0.014	U	0.0005	0.014	U		0.015	0.0003 J		0.014
23478-PeCDF	U		0.10	U		0.015	U		0.014	U		0.014	U		0.014	U		0.015	U	0.0003	0.014
123478-HxCDF	U		0.10	U	0.0001	0.015	U		0.014	U	0.0004	0.014	U		0.014	U		0.015	U	0.0004	0.014
123678-HxCDF	0.0012 J		0.10	U	0.0002	0.015	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014
234678-HxCDF	U		0.10	U		0.015	U	0.0001	0.014	U		0.014	U		0.014	U		0.015	U		0.014
123789-HxCDF	U		0.10	U		0.015	U		0.014	U		0.014	U		0.014	U	0.0002	0.015	U		0.014
1234678-HpCDF	0.0020 J		0.10	U		0.015	U		0.014	0.0013 J		0.014	0.0016 J		0.014	0.0016 J		0.015	0.0011 J		0.014
1234789-HpCDF	U		0.10	U		0.015	U		0.014	U		0.014	0.0002 J		0.014	U		0.015	U		0.014
OCDF	0.0041 J		0.20	U		0.030	U		0.028	U		0.029	U		0.028	U		0.029	U	0.0011	0.028
Total TCDDs	U			U			0.0011			0.0122			0.0121			0.0111			0.0071		
Total PeCDDs	0.0002			U			U			0.0056			0.0056			0.0038			0.0042		
Total HxCDDs	U			U			U			0.0045			0.0020			0.0045			0.0053		
Total HpCDDs	0.0052			0.0010			0.0009			0.0015			0.0031			0.0033			0.0027		
Total TCDFs	U			U			U			0.0084			0.0126			0.0058			0.0038		
Total PeCDFs	U			U			U			0.0015			0.0050			U			U		
Total HxCDFs	0.0012			U			U			0.0013			0.0018			0.0019			0.0009		
Total HpCDFs	0.0020			U			U			0.0016			0.0020			0.0016			0.0015		
Total Adjusted Conc																					
TEQ (ND=0)	0.0002			0.0000			0.0000			0.0001			0.0001			0.0000			0.0001		
TEQ (ND=1/2)	0.0022			0.0003			0.0003			0.0007			0.0008			0.0007			0.0005		

COC# 04885
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 12/27/01

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

12-04-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/04/01

Sample No.	05677			05678			05679			05680			05711			05712		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7245			7260			7808			6860			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0028	U		0.0028	U		0.0026	U		0.0029	U		0.020	U		0.020
12378-PeCDD	U	0.0001	0.014	U	0.0001	0.014	U		0.013	U		0.015	U		0.10	0.0009		0.10
123478-HxCDD	U		0.014	U		0.014	U		0.013	U		0.015	U		0.10	U		0.10
123678-HxCDD	U		0.014	U	0.0004	0.014	U	0.0005	0.013	0.0005 J		0.015	0.0046 J		0.10	U		0.10
123789-HxCDD	U		0.014	U		0.014	0.0005 J		0.013	U		0.015	U	0.0020	0.10	U		0.10
1234678-HpCDD	0.0010 J		0.014	U	0.0009	0.014	0.0009 J		0.013	0.0009 J		0.015	U	0.0062	0.10	U	0.0044	0.10
OCDD	U		0.028	U		0.028	U		0.026	U		0.029	U	0.0267	0.20	0.0258 J		0.20
2378-TCDF	U		0.0028	U		0.0028	U		0.0026	U		0.0029	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.014	U	0.0003	0.013	U		0.015	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.014	U		0.013	U	0.0003	0.015	0.0014 J		0.10	U		0.10
123478-HxCDF	U		0.014	U		0.014	U		0.013	U		0.015	U		0.10	0.0009 J		0.10
123678-HxCDF	U	0.0003	0.014	U	0.0001	0.014	U	0.0003	0.013	U	0.0004	0.015	U	0.0018	0.10	0.0010 J		0.10
234678-HxCDF	U	0.0002	0.014	U	0.0001	0.014	U	0.0002	0.013	U	0.0003	0.015	0.0012 J		0.10	U	0.0008	0.10
123789-HxCDF	U		0.014	U		0.014	0.0002 J		0.013	0.0002 J		0.015	U	0.0018	0.10	U	0.0010	0.10
1234678-HpCDF	0.0006 J		0.014	U		0.014	U		0.013	U		0.015	U		0.10	0.0016 J		0.10
1234789-HpCDF	U	0.0002	0.014	U		0.014	0.0002 J		0.013	0.0002 J		0.015	U		0.10	U		0.10
OCDF	U		0.028	U		0.028	U	0.0010	0.026	U		0.029	U		0.20	0.0037 J		0.20
Total TCDDs	0.0037			0.0009			0.0007			0.0008			U			U		
Total PeCDDs	U			U			U			0.0003			U			0.0009		
Total HxCDDs	0.0008			U			0.0005			0.0008			0.0046			U		
Total HpCDDs	0.0010			0.0005			0.0009			0.0014			0.0018			U		
Total TCDFs	0.0015			U			U			U			U			U		
Total PeCDFs	U			U			0.0003			U			0.0014			U		
Total HxCDFs	0.0002			U			0.0004			0.0002			0.0012			0.0018		
Total HpCDFs	0.0006			U			0.0002			0.0002			U			0.0016		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0001			0.0013			0.0007		
TEQ (ND=1/2)	0.0003			0.0002			0.0002			0.0003			0.0028			0.0018		

COC# 04885

12-04-01dioair.xls

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		05963		05964		05931	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		TAGA	
Air Volume (L)		-		-		-		0		0		4560	
Date Collected		-		-		-		12/19/01		12/19/01		12/19/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.40	0.27
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.059	0.027
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.027
Calcium	ICAP	3.3	2.5	4.3	2.5	4.2	2.5	U	2.5	U	2.5	2.8	0.55
Chromium	ICAP	0.75	0.13	0.82	0.13	0.80	0.13	U	0.13	U	0.13	U	0.027
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.055
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.058	0.055
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	1.3	0.14
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.032	0.011
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.7
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.027
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.055
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	11
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.027
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.7
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.055
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.10	0.055

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1.(Cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		05932		05933		05934		05935		05936		05937	
Location		TAGA		A-BARCLAY ST. & WEST BROADWAY		LOC 3B CHURCH & VESEY ST		B-CHURCH & DEY ST.		C -LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.	
Air Volume (L)		4183		4650		4870		4520		4180		4970	
Date Collected		12/19/01		12/19/01		12/19/01		12/19/01		12/19/01		12/19/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.53	0.30	1.1	0.27	2.3	0.26	15	0.28	0.84	0.30	U	0.25
Antimony	AA-Fur	U	0.012	0.019	0.011	0.024	0.01	0.18	0.011	0.016	0.012	U	0.01
Arsenic	AA-Fur	U	0.012	0.014	0.011	0.012	0.01	0.047	0.011	U	0.012	U	0.01
Barium	ICAP	0.063	0.03	0.061	0.027	0.076	0.026	0.56	0.028	0.09	0.03	U	0.025
Beryllium	ICAP	U	0.012	U	0.011	U	0.01	U	0.011	U	0.012	U	0.01
Cadmium	ICAP	U	0.03	U	0.027	U	0.026	U	0.028	U	0.03	U	0.025
Calcium	ICAP	2.5	0.60	9.3	0.54	20	0.51	170	0.55	7.0	0.60	U	0.50
Chromium	ICAP	U	0.03	0.05	0.027	U	0.026	0.089	0.028	U	0.03	U	0.025
Cobalt	ICAP	U	0.06	U	0.054	U	0.051	U	0.055	U	0.06	U	0.05
Copper	ICAP	0.078	0.06	0.18	0.054	0.26	0.051	1.3	0.055	0.13	0.06	U	0.05
Iron	ICAP	1.4	0.15	12	0.13	15	0.13	64	0.14	9.7	0.15	U	0.13
Lead	AA-Fur	0.024	0.012	0.12	0.011	0.12	0.01	0.57	0.011	0.048	0.012	U	0.01
Magnesium	ICAP	U	3.0	U	2.7	U	2.6	20	2.8	U	3.0	U	2.5
Manganese	ICAP	U	0.03	0.18	0.027	0.24	0.026	0.96	0.028	0.15	0.03	U	0.025
Nickel	ICAP	U	0.06	U	0.054	U	0.051	0.13	0.055	U	0.06	U	0.05
Potassium	ICAP	U	12	U	11	U	10	U	11	U	12	U	10
Selenium	AA-Fur	U	0.012	U	0.011	U	0.01	U	0.011	U	0.012	U	0.01
Silver	ICAP	U	0.03	U	0.027	U	0.026	U	0.028	U	0.03	U	0.025
Sodium	ICAP	U	3.0	U	2.7	U	2.6	5.4	2.8	U	3.0	U	2.5
Thallium	AA-Fur	U	0.012	U	0.011	U	0.01	U	0.011	U	0.012	U	0.01
Vanadium	ICAP	U	0.06	U	0.054	U	0.051	0.093	0.055	U	0.06	U	0.05
Zinc	ICAP	0.11	0.06	0.50	0.054	0.99	0.051	5.2	0.055	0.42	0.06	U	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (Cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		05938		05939		05940	
Location		P-ALBANY ST. & SOUTH END AVE		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		4700		4850		5090	
Date Collected		12/19/01		12/19/01		12/19/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.1	0.27	0.66	0.26	0.49	0.25
Antimony	AA-Fur	U	0.011	U	0.01	U	0.0098
Arsenic	AA-Fur	U	0.011	U	0.01	U	0.0098
Barium	ICAP	0.059	0.027	0.058	0.026	0.048	0.025
Beryllium	ICAP	U	0.011	U	0.01	U	0.0098
Cadmium	ICAP	U	0.027	U	0.026	U	0.025
Calcium	ICAP	4.2	0.53	3.2	0.52	3.5	0.49
Chromium	ICAP	U	0.027	U	0.026	0.039	0.025
Cobalt	ICAP	U	0.053	U	0.052	U	0.049
Copper	ICAP	0.071	0.053	0.062	0.052	0.056	0.049
Iron	ICAP	2.3	0.13	2.3	0.13	1.4	0.12
Lead	AA-Fur	0.026	0.011	0.024	0.01	0.022	0.0098
Magnesium	ICAP	U	2.7	U	2.6	U	2.5
Manganese	ICAP	0.036	0.027	0.035	0.026	0.026	0.025
Nickel	ICAP	U	0.053	U	0.052	U	0.049
Potassium	ICAP	U	11	U	10	U	9.8
Selenium	AA-Fur	U	0.011	U	0.01	U	0.0098
Silver	ICAP	U	0.027	U	0.026	U	0.025
Sodium	ICAP	U	2.7	3.4	2.6	U	2.5
Thallium	AA-Fur	U	0.011	U	0.01	U	0.0098
Vanadium	ICAP	U	0.053	U	0.052	U	0.049
Zinc	ICAP	0.11	0.053	0.10	0.052	0.094	0.049

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0034		WTC-0035		WTC-0029	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		O-17	
Air Volume (L)		-		-		-		0		0		4980	
Date Collected		-		-		-		12/19/01		12/19/01		12/19/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.56	0.25
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	0.037	0.025
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Calcium	ICAP	6.9	2.5	7	2.5	7.1	2.5	U	2.5	U	2.5	3.5	0.50
Chromium	ICAP	0.88	0.13	0.77	0.13	0.7	0.13	0.17	0.13	U	0.13	U	0.025
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	1.2	0.13
Lead	AA-Fur	U	0.05	0.097	0.05	U	0.05	U	0.05	U	0.05	0.036	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.5
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Sodium	ICAP	20	13	20	13	21	13	U	13	U	13	U	2.5
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Zinc	ICAP	0.26	0.25	0.42	0.25	0.48	0.25	U	0.25	U	0.25	0.082	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		WTC-0030		WTC-0031		WTC-0032		WTC-0033		WTC-0041		WTC-0042	
Location		O-18		O-19		P-5		P-8		Field Blank		Lot Blank	
Air Volume (L)		4,949.5		4,740.5		6,004.0		6,380.0		0.0		0.0	
Date Collected		12/19/01		12/19/01		12/19/01		12/19/01		12/21/01		12/21/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter
Aluminum	ICAP	0.66	0.25	U	0.26	0.40	0.21	0.48	0.20	1.7	1.3	3.3	1.3
Antimony	AA-Fur	U	0.01	U	0.011	U	0.0083	U	0.0078	U	0.05	U	0.05
Arsenic	AA-Fur	U	0.01	U	0.011	U	0.0083	U	0.0078	U	0.05	U	0.05
Barium	ICAP	0.077	0.025	U	0.026	U	0.021	U	0.02	U	0.13	U	0.13
Beryllium	ICAP	U	0.01	U	0.011	U	0.0083	U	0.0078	U	0.05	U	0.05
Cadmium	ICAP	U	0.025	U	0.026	U	0.021	U	0.02	U	0.13	U	0.13
Calcium	ICAP	2.4	0.51	0.61	0.53	2.5	0.42	U	0.39	U	2.5	U	2.5
Chromium	ICAP	U	0.025	U	0.026	0.039	0.021	U	0.02	U	0.13	0.26	0.13
Cobalt	ICAP	U	0.051	U	0.053	U	0.042	U	0.039	U	0.25	U	0.25
Copper	ICAP	0.051	0.051	U	0.053	U	0.042	U	0.039	U	0.25	U	0.25
Iron	ICAP	1.9	0.13	0.54	0.13	0.67	0.10	0.28	0.098	U	0.63	U	0.63
Lead	AA-Fur	0.027	0.01	U	0.011	0.015	0.0083	0.029	0.0078	U	0.05	U	0.05
Magnesium	ICAP	U	2.5	U	2.6	U	2.1	U	2.0	U	13	U	13
Manganese	ICAP	0.032	0.025	U	0.026	U	0.021	U	0.02	U	0.13	U	0.13
Nickel	ICAP	U	0.051	U	0.053	U	0.042	U	0.039	U	0.25	U	0.25
Potassium	ICAP	U	10	U	11	U	8.3	U	7.8	U	50	U	50
Selenium	AA-Fur	U	0.01	U	0.011	U	0.0083	U	0.0078	U	0.05	U	0.05
Silver	ICAP	U	0.025	U	0.026	U	0.021	U	0.02	U	0.13	U	0.13
Sodium	ICAP	U	2.5	U	2.6	U	2.1	U	2.0	U	13	U	13
Thallium	AA-Fur	U	0.01	U	0.011	U	0.0083	U	0.0078	U	0.05	U	0.05
Vanadium	ICAP	U	0.051	U	0.053	U	0.042	U	0.039	U	0.25	U	0.25
Zinc	ICAP	0.084	0.051	U	0.053	U	0.042	0.053	0.039	U	0.25	U	0.25

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 WTC Landfill site

Client ID		WTC-0036		WTC-0037		WTC-0038		WTC-0039		WTC-0040	
Location		O-17		O-18		O-19		P-5		P-8	
Air Volume (L)		4470.0		4940.0		4607.5		1990.0		3820.0	
Date Collected		12/21/01		12/21/01		12/21/01		12/21/01		12/21/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.63	0.28	0.43	0.25	U	0.27	U	0.63	3.0	0.33
Antimony	AA-Fur	U	0.011	U	0.01	U	0.011	U	0.025	0.013	0.013
Arsenic	AA-Fur	U	0.011	U	0.01	U	0.011	U	0.025	0.017	0.013
Barium	ICAP	U	0.028	0.038	0.025	U	0.027	U	0.063	0.051	0.033
Beryllium	ICAP	U	0.011	U	0.01	U	0.011	U	0.025	U	0.013
Cadmium	ICAP	U	0.028	U	0.025	U	0.027	U	0.063	U	0.033
Calcium	ICAP	5.7	0.56	1.4	0.51	U	0.54	2.1	1.3	35	0.65
Chromium	ICAP	U	0.028	U	0.025	U	0.027	0.47	0.063	0.10	0.033
Cobalt	ICAP	U	0.056	U	0.051	U	0.054	U	0.13	U	0.065
Copper	ICAP	U	0.056	0.098	0.051	U	0.054	U	0.13	0.34	0.065
Iron	ICAP	1.5	0.14	1.1	0.13	0.36	0.14	U	0.31	8.9	0.16
Lead	AA-Fur	0.03	0.011	0.012	0.01	U	0.011	U	0.025	0.29	0.013
Magnesium	ICAP	U	2.8	U	2.5	U	2.7	U	6.3	3.3	3.3
Manganese	ICAP	U	0.028	U	0.025	U	0.027	U	0.063	0.15	0.033
Nickel	ICAP	U	0.056	U	0.051	U	0.054	U	0.13	U	0.065
Potassium	ICAP	U	11	U	10	U	11	U	25	U	13
Selenium	AA-Fur	U	0.011	U	0.01	U	0.011	U	0.025	U	0.013
Silver	ICAP	U	0.028	U	0.025	U	0.027	U	0.063	U	0.033
Sodium	ICAP	U	2.8	U	2.5	U	2.7	U	6.3	U	3.3
Thallium	AA-Fur	U	0.011	U	0.01	U	0.011	U	0.025	U	0.013
Vanadium	ICAP	U	0.056	U	0.051	U	0.054	U	0.13	U	0.065
Zinc	ICAP	0.094	0.056	U	0.051	U	0.054	U	0.13	0.61	0.065

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/06/01

Sample No.	WG6343-1			11371			11372			11373			11374			11375			11376		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			7455			7455			7425			7455			7455			7500		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0027
12378-PeCDD	U		0.10	0.0010 J		0.013	U		0.013	U	0.0005	0.013	U		0.013	U		0.013	U	0.0003	0.013
123478-HxCDD	U	0.0014	0.10	U	0.0008	0.013	U		0.013	U		0.013	U		0.013	U		0.013	U	0.0003	0.013
123678-HxCDD	U	0.0028	0.10	U		0.013	U		0.013	U	0.0009	0.013	U	0.0006	0.013	U	0.0004	0.013	U		0.013
123789-HxCDD	U	0.0017	0.10	0.0014 J		0.013	U	0.0005	0.013	U	0.0004	0.013	U	0.0002	0.013	U		0.013	U	0.0004	0.013
1234678-HpCDD	0.0056 J		0.10	0.0097 J		0.013	U		0.013	U		0.013	U		0.013	U		0.013	U		0.013
OCDD	0.0310 J		0.20	U		0.027	U		0.027	U		0.027	U		0.027	U		0.027	U		0.027
2378-TCDF	U	0.0005	0.020	U		0.0027	U		0.0027	0.0025 J		0.0027	0.0010 J		0.0027	U		0.0027	U		0.0027
12378-PeCDF	0.0008 J		0.10	U		0.013	U		0.013	0.0007 J		0.013	0.0003 J		0.013	0.0002 J		0.013	0.0003 J		0.013
23478-PeCDF	U		0.10	U		0.013	U		0.013	0.0023 J		0.013	0.0009 J		0.013	0.0002 J		0.013	0.0003 J		0.013
123478-HxCDF	U	0.0016	0.10	U		0.013	U		0.013	U	0.0009	0.013	U	0.0004	0.013	U	0.0002	0.013	U	0.0002	0.013
123678-HxCDF	U	0.0016	0.10	U		0.013	U		0.013	0.0006 J		0.013	U	0.0004	0.013	U	0.0002	0.013	0.0003 J		0.013
234678-HxCDF	0.0015 J		0.10	U		0.013	U		0.013	0.0008 J		0.013	U	0.0004	0.013	U	0.0001	0.013	U		0.013
123789-HxCDF	0.0021 J		0.10	U		0.013	U		0.013	U		0.013	U		0.013	U		0.013	U	0.0002	0.013
1234678-HpCDF	U	0.0027	0.10	U	0.0006	0.013	U		0.013	0.0011 J		0.013	U		0.013	U		0.013	U		0.013
1234789-HpCDF	U		0.10	U		0.013	U		0.013	U		0.013	U		0.013	U		0.013	U	0.0003	0.013
OCDF	0.0052 J		0.20	0.0009 J		0.027	U		0.027	U	0.0010	0.027	U		0.027	U		0.027	U		0.027
Total TCDDs	U			U			U			0.0091			0.0084			0.0078			0.0027		
Total PeCDDs	U			0.0036			0.0003			0.0038			0.0021			0.0025			0.0011		
Total HxCDDs	U			0.0097			0.0035			0.0037			0.0018			0.0018			0.0011		
Total HpCDDs	0.0066			0.0130			0.0063			0.0028			0.0021			0.0020			0.0021		
Total TCDFs	0.0002			U			U			0.0140			0.0057			0.0031			0.0006		
Total PeCDFs	U			U			U			0.0119			0.0035			0.0019			0.0006		
Total HxCDFs	0.0021			0.0003			U			0.0044			0.0016			0.0004			0.0006		
Total HpCDFs	U			U			0.0006			0.0011			0.0007			0.0007			0.0006		
Total Adjusted Conc																					
TEQ (ND=0)	0.0005			0.0007			0.0000			0.0016			0.0005			0.0001			0.0002		
TEQ (ND=1/2)	0.0012			0.0011			0.0004			0.0017			0.0005			0.0002			0.0004		

COC# 04370
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/2/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

12-06-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/06/01

Sample No.	11377			11378			11379			11380			11381			11382		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7515			7305			7545			7125			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0027	U		0.0027	U		0.0028	U		0.020	U		0.020
12378-PeCDD	U		0.013	U		0.014	U		0.013	U	0.0001	0.014	0.0005 J		0.10	U	0.0008	0.10
123478-HxCDD	U	0.0002	0.013	U		0.014	U		0.013	U		0.014	U		0.10	U		0.10
123678-HxCDD	U	0.0004	0.013	U	0.0008	0.014	U	0.0005	0.013	U	0.0004	0.014	U	0.0034	0.10	0.0029 J		0.10
123789-HxCDD	U	0.0002	0.013	U	0.0003	0.014	U		0.013	U	0.0002	0.014	U		0.10	U		0.10
1234678-HpCDD	U		0.013	U		0.014	U		0.013	U		0.014	U	0.0055	0.10	0.0070 J		0.10
OCDD	U		0.027	U		0.027	U		0.027	U		0.028	U		0.20	0.0366 J		0.20
2378-TCDF	U		0.0027	U		0.0027	U		0.0027	U		0.0028	U		0.020	U		0.020
12378-PeCDF	U		0.013	U		0.014	U		0.013	U		0.014	U		0.10	U		0.10
23478-PeCDF	U		0.013	U		0.014	U		0.013	U		0.014	U		0.10	U	0.0006	0.10
123478-HxCDF	U		0.013	U		0.014	U		0.013	U		0.014	U		0.10	U	0.0003	0.10
123678-HxCDF	U	0.0002	0.013	U		0.014	U		0.013	0.0001 J		0.014	U		0.10	U	0.0006	0.10
234678-HxCDF	U		0.013	U		0.014	U		0.013	U		0.014	U		0.10	U	0.0003	0.10
123789-HxCDF	U		0.013	U		0.014	U		0.013	U		0.014	U		0.10	U		0.10
1234678-HpCDF	U		0.013	U		0.014	U	0.0006	0.013	U		0.014	U	0.0014	0.10	0.0014 J		0.10
1234789-HpCDF	U		0.013	U		0.014	U		0.013	U		0.014	U		0.10	U		0.10
OCDF	U	0.0009	0.027	U		0.027	U		0.027	U		0.028	0.0033 J		0.20	U		0.20
Total TCDDs	0.0021			U			0.0004			0.0009			U			U		
Total PeCDDs	U			U			U			U			0.0014			U		
Total HxCDDs	U			0.0006			0.0002			U			0.0010			0.0029		
Total HpCDDs	0.0025			0.0024			0.0018			0.0010			U			0.0113		
Total TCDFs	0.0016			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			0.0003			0.0004			U			U		
Total HpCDFs	0.0005			0.0004			U			0.0003			U			0.0021		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0003			0.0004		
TEQ (ND=1/2)	0.0001			0.0001			0.0001			0.0001			0.0006			0.0009		

COC# 04370

Table 1.1 Results of the Analysis for VOC in Air (Summa)
WA # 0-756 NYC-WTC

Sampling Date 12/10/01														
Sample Number	Method Blank #1		2-0072		2-0169		Method Blank #2		2-0190		2-0203		2-0224	
Sample Location	12/13/01		Location R		South Tower South Side		09/14/01		Austin Tobin Plaza		SW Side of South Tower		NW Side of North Tower	
Dilution Factor	1.0		1.34		1.3		1.0		1.3		1.3		1.32	
	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv
Freon 12	U	0.50	0.67	0.67	0.7	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Freon 114	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Chloromethane	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Vinyl Chloride	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Bromomethane	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Chloroethane	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Freon 11	U	0.50	U	0.67	U	0.65	U	0.50	0.68	0.65	U	0.65	U	0.66
1,1-Dichloroethene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Freon 113	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Methylene Chloride	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,1-Dichloroethane	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
cis-1,2-Dichloroethene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Chloroform	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,1,1-Trichloroethane	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Carbon Tetrachloride	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Benzene	U	0.50	0.71	0.67	1.3	0.65	U	0.50	1.2	0.65	2.2	0.65	1.3	0.66
1,2-Dichloroethane	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Trichloroethene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,2-Dichloropropane	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
cis-1,3-Dichloropropene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Toluene	U	0.50	1.7	0.67	3.0	0.65	U	0.50	2.3	0.65	3.6	0.65	4.1	0.66
trans-1,3-Dichloropropene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,1,2-Trichloroethane	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Tetrachloroethene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Ethylene Dibromide	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Chlorobenzene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Ethyl Benzene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
m,p-Xylene	U	0.50	0.77	0.67	1.4	0.65	U	0.50	1.2	0.65	1.9	0.65	1.4	0.66
o-Xylene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	0.75	0.65	U	0.66
Styrene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,1,2,2-Tetrachloroethane	U	0.50	1.9	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,3,5-Trimethylbenzene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,2,4-Trimethylbenzene	U	0.50	U	0.67	0.64 J	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,3-Dichlorobenzene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,4-Dichlorobenzene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Chlorotoluene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,2-Dichlorobenzene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
1,2,4-Trichlorobenzene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Hexachlorobutadiene	U	0.50	U	0.67	U	0.65	U	0.50	U	0.65	U	0.65	U	0.66
Propylene	U	2.0	U	2.7	4.6	2.6	U	2.0	U	2.6	U	2.6	U	2.6
1,3-Butadiene	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
Acetone	U	2.0	4.4	2.7	4.3	2.6	U	2.0	6.1	2.6	4.6	2.6	12	2.6
Carbon Disulfide	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
2-Propanol	U	2.0	U	2.7	U	2.6	U	2.0	U	2.5	U	2.6	U	2.6
trans-1,2-Dichloroethene	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
Vinyl Acetate	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
2-Butanone (Methyl Ethyl Ketone)	U	2.0	U	2.7	U	2.6	U	2.0	U	2.3	U	2.6	U	2.6
Hexane	U	2.0	U	2.7	U	2.6	U	2.0	U	2.5	U	2.6	U	2.6
Tetrahydrofuran	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
Cyclohexane	U	2.0	U	2.7	U	2.6	U	2.0	U	2.3	U	2.6	U	2.6
1,4-Dioxane	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
Bromodichloromethane	U	2.0	U	2.7	U	2.6	U	2.0	U	2.3	U	2.6	U	2.6
4-Methyl-2-pentanone	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
2-Hexanone	U	2.0	U	2.7	U	2.6	U	2.0	U	2.5	U	2.6	U	2.6
Dibromochloromethane	U	2.0	U	2.7	U	2.6	U	2.0	U	2.5	U	2.6	U	2.6
Bromoform	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
4-Ethyltoluene	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
Ethanol	U	2.0	4.6 J	2.7	6.9 J	2.6	U	2.0	7.0 J	2.6	5.3 J	2.6	5.7 J	2.6
Methyl tert-Butyl Ether	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6
Heptane	U	2.0	U	2.7	U	2.6	U	2.0	U	2.6	U	2.6	U	2.6

U denotes less than the MDL (not detected)
J denotes value is below the detection limit and is estimated.

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/19/01

Sample No.	WG-7013-1P		05921		05922		05923		05924		05925		05926	
Sampling Location	Method Blank		R		R		A		3B		B		C	
Sample Volume (L)	0		7200		6915		7275		7365		7320		6465	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DcCB	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of MoCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of DiCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of TrCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of TeCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of PeCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of HxCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of HpCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of OcCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Sum of NoCBs	U	10.0	U	1.39	U	1.45	U	1.37	U	1.36	U	1.37	U	1.55
Total	0		0		0		0		0		0		0	

COC# 04884

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 1/04/02

12-19-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/19/01

Sample No.	05927		05928		05929		05930		05961		05962	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	6535		7515		7560		6495		0		0	
Analyte	Result ng/m³	MDL ng/m³	Result ng/m³	MDL ng/m³	Result ng/m³	MDL ng/m³	Result ng/m³	MDL ng/m³	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of MoCBs	2.16	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of DiCBs	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of TrCBs	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of TeCBs	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of PeCBs	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of HxCBs	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of HpCBs	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of OcCBs	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Sum of NoCBs	U	1.53	U	1.33	U	1.32	U	1.54	U	10.0	U	10.0
Total	2.16		0		0		0		0		0	

COC# 04884

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/19/01 0750 to 1538

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
12/19/01	05953	A	1000	Air	<0.01	<0.02	<0.02
12/19/01	05954	3B	1000	Air	<0.01	<0.02	<0.02
12/19/01	05955	B	1000	Air	<0.01	<0.02	<0.02
12/19/01	05956	C	1000	Air	<0.01	<0.02	<0.02
12/19/01	05957	D	1000	Air	<0.01	<0.02	<0.02
12/19/01	05960	E	1000	Air	<0.01	<0.02	<0.02
12/19/01	05958	P	1000	Air	<0.01	<0.02	<0.02
12/19/01	05959	S	1000	Air	<0.01	<0.02	<0.02
12/19/01	05951	TAGA	1000	Air	<0.01	<0.02	<0.02
12/19/01	05952	TAGA	1000	Air	<0.01	<0.02	<0.02

coc# 04378

NS: Not sampled

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
Location 3B Church & Vesey

ERT 1/04/02

NIOSH 7500: Silica crystalline by XRD

FL-12-19-01silica.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/11/01

Sample No.	WG6353-1			05871			05872			05873			05874			05875			05876		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			Lot 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			6600			6825			6765			7200			7200			7200		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0030	U		0.0029	U		0.0030	U		0.0028	U		0.0028	U		0.0028
12378-PeCDD	0.0006 J		0.10	U		0.015	0.0006 J		0.015	U		0.015	U	0.0001	0.014	U	0.0001	0.014	U		0.014
123478-HxCDD	U		0.10	U		0.015	U	0.0002	0.015	U		0.015	U		0.014	U		0.014	U		0.014
123678-HxCDD	0.0034 J		0.10	U	0.0005	0.015	U		0.015	U	0.0006	0.015	U	0.0004	0.014	U	0.0004	0.014	U	0.0004	0.014
123789-HxCDD	U		0.10	U		0.015	0.0008 J		0.015	U		0.015	U		0.014	U	0.0002	0.014	U		0.014
1234678-HpCDD	U	0.0051	0.10	U		0.015	0.0027 J		0.015	U		0.015	U		0.014	U		0.014	U		0.014
OCDD	0.0248 J		0.20	U		0.030	U		0.029	U		0.030	U		0.028	U		0.028	U		0.028
2378-TCDF	U		0.020	U		0.0030	U		0.0029	U		0.0030	0.0002 J		0.0028	0.0002 J		0.0028	U		0.0028
12378-PeCDF	U	0.0004	0.10	U		0.015	U		0.015	U		0.015	U	0.0001	0.014	U	0.0001	0.014	U	0.0002	0.014
23478-PeCDF	U	0.0006	0.10	U		0.015	U		0.015	U		0.015	0.0001 J		0.014	0.0002 J		0.014	U	0.0002	0.014
123478-HxCDF	U		0.10	U	0.0002	0.015	U		0.015	U	0.0001	0.015	U	0.0001	0.014	U	0.0002	0.014	U	0.0003	0.014
123678-HxCDF	U		0.10	U	0.0002	0.015	U		0.015	0.0001 J		0.015	U	0.0001	0.014	U		0.014	U		0.014
234678-HxCDF	U		0.10	U	0.0001	0.015	U		0.015	U		0.015	0.0001 J		0.014	U	0.0001	0.014	U	0.0001	0.014
123789-HxCDF	U		0.10	U		0.015	U		0.015	U		0.015	0.0001 J		0.014	U		0.014	U		0.014
1234678-HpCDF	U		0.10	U		0.015	U		0.015	U	0.0003	0.015	U	0.0005	0.014	0.0005 J		0.014	U	0.0007	0.014
1234789-HpCDF	U		0.10	U		0.015	0.0001 J		0.015	U		0.015	U	0.0001	0.014	U		0.014	U		0.014
OCDF	U	0.0014	0.20	U		0.030	U		0.029	U	0.0004	0.030	U	0.0007	0.028	0.0005 J		0.028	U	0.0006	0.028
Total TCDDs	U			U			0.0017			0.0014			0.0012			0.0022			0.0022		
Total PeCDDs	0.0006			U			0.0034			0.0007			0.0007			0.0011			0.0006		
Total HxCDDs	0.0044			U			0.0057			0.0003			0.0006			0.0009			0.0003		
Total HpCDDs	0.0024			0.0017			0.0050			0.0010			0.0015			0.0009			0.0014		
Total TCDFs	U			U			U			U			0.0009			0.0014			U		
Total PeCDFs	U			U			U			U			0.0007			0.0004			U		
Total HxCDFs	U			0.0003			U			0.0001			0.0005			0.0005			0.0003		
Total HpCDFs	0.0010			0.0008			0.0009			U			U			0.0006			0.0002		
Total Adjusted Conc																					
TEQ (ND=0)	0.0006			0.0000			0.0004			0.0000			0.0001			0.0001			0.0000		
TEQ (ND=1/2)	0.0012			0.0001			0.0005			0.0001			0.0002			0.0002			0.0001		

COC# 19658
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/4/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

12-11-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/11/01

Sample No.	05877			05878			05879			05880			05901			05902		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7200			6825			7230			7245			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0028	U		0.0029	U		0.0028	U		0.0028	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.015	U	0.0001	0.014	0.0002 J		0.014	U	0.0004	0.10	U		0.10
123478-HxCDD	U		0.014	U		0.015	U	0.0001	0.014	U		0.014	U		0.10	U		0.10
123679-HxCDD	U	0.0006	0.014	U		0.015	U	0.0006	0.014	U		0.014	U	0.0033	0.10	0.0023 J		0.10
123789-HxCDD	U		0.014	U		0.015	U	0.0001	0.014	U		0.014	U		0.10	0.0005 J		0.10
1234678-HpCDD	U		0.014	U		0.015	U		0.014	U		0.014	U	0.0042	0.10	0.0033 J		0.10
OCDD	U		0.028	U		0.029	U		0.028	U		0.028	U		0.20	0.0187 J		0.20
2378-TCDF	U		0.0028	U		0.0029	U		0.0028	U		0.0028	U		0.020	U		0.020
12378-PeCDF	U	0.0003	0.014	U		0.015	U		0.014	U		0.014	U	0.0003	0.10	U		0.10
23478-PeCDF	0.0003 J		0.014	U		0.015	U	0.0001	0.014	U		0.014	U		0.10	U		0.10
123478-HxCDF	U	0.0004	0.014	U	0.0001	0.015	U	0.0001	0.014	U	0.0001	0.014	U		0.10	U		0.10
123678-HxCDF	0.0003 J		0.014	U	0.0001	0.015	U	0.0001	0.014	U		0.014	U		0.10	0.0004 J		0.10
234678-HxCDF	0.0004 J		0.014	U	0.0001	0.015	U	0.0001	0.014	U		0.014	U		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.015	U		0.014	U		0.014	U	0.0003	0.10	U		0.10
1234678-HpCDF	0.0016 J		0.014	U	0.0004	0.015	U		0.014	U		0.014	0.0008 J		0.10	U		0.10
1234789-HpCDF	U	0.0003	0.014	U		0.015	U	0.0001	0.014	U		0.014	U		0.10	U		0.10
OCDF	0.0014 J		0.028	U		0.029	U	0.0004	0.028	U	0.0005	0.028	U		0.20	0.0014 J		0.20
Total TCDDs	0.0031			0.0008			0.0004			0.0008			U			U		
Total PeCDDs	0.0022			U			0.0002			0.0010			0.0014			U		
Total HxCDDs	0.0020			0.0012			0.0003			0.0011			0.0010			0.0038		
Total HpCDDs	0.0012			0.0009			0.0009			0.0016			U			0.0046		
Total TCDFs	0.0047			0.0002			U			U			U			U		
Total PeCDFs	0.0046			U			U			U			U			U		
Total HxCDFs	0.0016			0.0002			0.0002			0.0001			U			0.0004		
Total HpCDFs	0.0019			U			0.0003			0.0005			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0002			0.0000			0.0000			0.0001			0.0003			0.0003		
TEQ (ND=1/2)	0.0003			0.0001			0.0001			0.0020			0.0005			0.0008		

COC# 19858

12-11-01dioxir.xls

Table 1.1 Results of the Analysis for VOC in Air (Summa)
WA # 0-236 NVC-WTC

Sampling Date 12/17/01												
Sample Number	Method Blank #1		3-0092		3-0099		3-0134		3-0143		3-0191	
Sample Location	0112353-06A		NW Corner		SW Corner		East		South		Location, R	
Dilution Factor	1.0		1.32		1.34		1.32		1.30		1.30	
	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv
Freon 12	U	0.50	1.2	0.66	0.71	0.67	2.2	0.66	0.88	0.65	0.74	0.65
Freon 114	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Chloromethane	U	0.50	0.76 J	0.66	1.0 J	0.67	1.2 J	0.66	0.82 J	0.65	0.72 J	0.65
Vinyl Chloride	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Bromomethane	U	0.50	U J	0.66	U J	0.67	U J	0.66	U J	0.65	U J	0.65
Chloroethane	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Freon 11	U	0.50	1.9	0.66	U	0.67	0.84	0.66	U	0.65	U	0.65
1,1-Dichloroethene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Freon 113	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Methylene Chloride	U	0.50	1.3	0.66	0.96	0.67	1.2	0.66	1.2	0.65	2.5	0.65
1,1-Dichloroethane	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
cis-1,2-Dichloroethene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Chloroform	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,1,1-Trichloroethane	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Carbon Tetrachloride	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Benzene	U	0.50	0.74	0.66	1.3	0.67	1.2	0.66	0.90	0.65	0.96	0.65
1,2-Dichloroethane	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Trichloroethene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,2-Dichloropropane	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
cis-1,3-Dichloropropene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Toluene	U	0.50	2.6	0.66	3.6	0.67	2.6	0.66	2.7	0.65	1.5	0.65
trans-1,3-Dichloropropene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,1,2-Trichloroethane	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Tetrachloroethene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	0.72	0.65
Ethylene Dibromide	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Chlorobenzene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Ethyl Benzene	U	0.50	U	0.66	0.77	0.67	0.69	0.66	U	0.65	U	0.65
m,p-Xylene	U	0.50	0.98	0.66	2.6	0.67	1.9	0.66	2.5	0.65	0.70	0.65
o-Xylene	U	0.50	U	0.66	0.98	0.67	0.80	0.66	0.82	0.65	U	0.65
Styrene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,1,2,2-Tetrachloroethane	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,3,5-Trimethylbenzene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,2,4-Trimethylbenzene	U	0.50	U	0.66	0.99	0.67	0.98	0.66	U	0.65	U	0.65
1,3-Dichlorobenzene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,4-Dichlorobenzene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Chlorotoluene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,2-Dichlorobenzene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
1,2,4-Trichlorobenzene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Hexachlorobutadiene	U	0.50	U	0.66	U	0.67	U	0.66	U	0.65	U	0.65
Propylene	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
1,3-Butadiene	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
Acetone	U	2.0	4.5	2.6	4.5	2.7	5.6	2.6	4.5	2.6	4.8	2.6
Carbon Disulfide	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
2-Propanol	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
trans-1,2-Dichloroethene	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
Vinyl Acetate	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
2-Butanone (Methyl Ethyl Ketone)	U	2.0	U	2.6	U	2.7	U	2.6	4.4	2.6	U	2.6
Hexane	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
Tetrahydrofuran	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
Cyclohexane	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
1,4-Dioxane	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
Bromodichloromethane	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
4-Methyl-2-pentanone	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
2-Hexanone	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
Dibromochloromethane	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
Bromoform	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
4-Ethyltoluene	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6
Ethanol	U	2.0	5.7	2.6	4.4	2.7	6.0	2.6	7.2	2.6	4.5	2.6
Methyl tert-Butyl Ether	U	2.0	U	2.6	4.5	2.7	U	2.6	U	2.6	U	2.6
Heptane	U	2.0	U	2.6	U	2.7	U	2.6	U	2.6	U	2.6

U denotes less than the MDL (not detected)
J denotes value is below the detection limit and is estimated.

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Rob T.

U.S. EPA: Norrell

Date: 1/10/02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2647	2607	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0736	0735	0739			
Stop Time	1403	1403	1407			
Run Time (Minutes)	387.5	388.5	388.5			
Minimum Concentration (ug/m3)	0.0	0.0	~~33.8~~ 0.3 (0.4)			
Maximum Concentration (ug/m3)	98.0	171.7	78.6			
Average Concentration (TWA) (ug/m3)	34.9 ~~41.8~~	41.6	33.8			

NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/10/02

File Name	NYC727	NYC728	NYC729	NYC730	NYC732	NYC731
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07329	A07330	A07331	A07332
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	690	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	960	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	34	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	36	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	160	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	32	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	37	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	31	RL
Tetrahydrofuran	RL	RL	RL	RL	51	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	32	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	880	RL
Heptane	RL	RL	RL	RL	23	RL
Trichloroethene	RL	RL	RL	RL	47	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	190	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	51	RL
Ethylbenzene	RL	RL	RL	RL	200	RL
m&p Xylenes	RL	RL	RL	RL	38	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	45	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	21	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

WESTON

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/10/02 RST: B Hoffman Early

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	0817	ND	ND	.1	20.1	ND	ND	ND	ND	ND	ND	ND	ND
Mi	0823	ND	ND	.1	20.1	1	ND	ND	ND	ND	ND	ND	ND
N	0828	ND	ND	.1	20.1	ND	ND	ND	ND	ND	ND	ND	ND
J	0840	ND	ND	ND	20.5	3	ND	ND	ND	ND	ND	ND	ND
Q	0845	ND	ND	ND	20.1	ND	ND	ND	ND	ND	ND	ND	ND
F	0850	ND	ND	ND	20.1	ND	ND	ND	ND	ND	ND	ND	ND
A	0859	ND	ND	ND	20.3	1	ND	ND	ND	ND	ND	ND	ND
C	0909	ND	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
B	0916	ND	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
H	0928	ND	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
I	0936	ND	ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	ND
D	0944	ND	ND	ND	20.5	5	ND	ND	ND	ND	ND	ND	ND
K	0950	ND	ND	ND	20.5	4	ND	ND	ND	ND	ND	ND	ND
T	0957	ND	ND	ND	20.5	1	ND	ND	ND	ND	ND	ND	ND
U	1005	ND	ND	ND	20.5	2	ND	ND	ND	ND	ND	ND	ND
V	1007	ND	ND	ND	20.6	1	ND	ND	ND	ND	ND	ND	ND
S	1016	ND	ND	ND	20.6	3	ND	ND	ND	ND	ND	ND	ND
P	1020	ND	ND	ND	20.6	8	ND	ND	ND	ND	ND	ND	ND
E	1030	ND	ND	ND	20.6	7	ND	ND	ND	ND	ND	ND	ND

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location Mi: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 5 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/10/02 RST: B. Hoffman

Location	Time	FID (units)	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1214	+	ND	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
M1	1215		ND	ND	20.7	2	ND	ND	ND	ND	ND	ND	ND
N	1219		ND	ND	20.8	5	ND	ND	ND	ND	ND	ND	ND
J	1223		ND	ND	20.8	6	ND	ND	ND	ND	ND	ND	ND
Q	1226		ND	ND	20.8	5	ND	ND	ND	ND	ND	ND	ND
F	1229		ND	ND	20.7	3	ND	ND	ND	ND	ND	ND	ND
A	1237		ND	ND	20.9	2	ND	ND	ND	ND	ND	ND	ND
C	1240		ND	ND	20.9	10	ND	ND	ND	ND	ND	ND	ND
B	1244		ND	ND	20.9	2	ND	ND	ND	ND	ND	ND	ND
H	1253		ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
I	1256		ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
D	13~~09~~ 07		ND	ND	20.9	4	ND	ND	ND	ND	ND	ND	ND
K	1309		ND	ND	20.9	3	ND	ND	ND	ND	ND	ND	ND
T	1314		ND	ND	20.9	5	ND	ND	ND	ND	ND	ND	ND
U	1318		ND	ND	20.9	4	ND	ND	ND	ND	ND	ND	ND
V	1322		ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
S	1330		ND	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
P	1333		ND	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
E	1335		ND	ND	21.0	2	ND	ND	ND	ND	ND	ND	ND

Location A: Barklay and West Broadway
Location B: Church and Dey
Location C: Liberty and Church
Location D: Albany and Greenwich
Location E: Liberty and South End
Location F: West and Vesey
Location G: No location
Location H: Chase Plaza
Location I: Wall Street and Broadway
Location J: West and Warren
Location K: Albany and West
Location L: Stuyvesant High School
Location M1: West and Warren
Location N: Pier 25 Volleyball
Location O: No location
Location P: Albany and South End
Location Q: West and Murray
Location R: No asbestos sampling
Location S: Rector and South End
Location T: Pier 6 Heliport
Location U: Pier 6 Exit 2
Location V: Pier 6 Bus Sign
Location W: No location
Location X: No location
Location Y: No location
Location Z: No location

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday - Monday, January 12 - 14, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:00 p.m. on 1/14

Air: **Fixed Monitors in New York:**

Asbestos - EPA analyzed 175 samples taken in and around ground zero from January 7 through January 11. EPA also sampled for asbestos at two additional lower Manhattan locations on January 7 through January 10. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,727, with 30 samples above the standard (27 of these were collected prior to September 30, the other three were collected on October 9, November 27 and December 27).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at P.S. 154: 333 East 135th St, Bronx, Intermediate School 143 (511 W. 182nd St., Manhattan), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 7 through January 10. None showed exceedances of the AHERA re-entry standard. (Note: A sample was not collected from P.S. 44 on January 10 due to an equipment malfunction.)

Staten Island Landfill:
Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 12 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from January 6 through January 10 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM10 - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from January 6 through January 10 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 11 and January 13 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either did not exceed OSHA standards, or showed no detectable levels, of benzene on both January 11 and January 13.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 13. Nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, January 14, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 7, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location M-1) was not collected due to an equipment malfunction.
Note: Low sample volume recorded.

NYC / ER (Jan 8, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location E) was not collected due to an equipment malfunction.
Note: Low sample volumes recorded.

NYC / ER (Jan 8, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 9, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 9, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location D) was not collected due to an equipment malfunction.
Note: Low sample volume recorded.

NYC / ER (Jan 10, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location W) was not collected since the cartridge was missing.

NYC / ER (Jan 10, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 11, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.
1 sample (Location F) was not analyzed due to overloading of particulates.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 11) - Particulate Monitoring (Dataram)

Monitoring was not conducted due to the weather conditions.

Fresh Kills (Jan 12) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Oct 26) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: QA/QC review of chromium in air analytical data has revealed that chromium is not present in these samples.

NYC / ER (Oct 30) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: QA/QC review of chromium in air analytical data has revealed that chromium is not present in these samples.

NYC / ER (Oct 30) - PCBs

Trace amounts detected in 1 of 10 samples well below levels of concern.
Concentration detected was below the EPA Removal Action level guidelines.
9 samples analyzed did not detect any PCBs.

NYC / ER (Nov 2) - PCBs

Trace amounts detected in 3 of 10 samples well below levels of concern.
Concentrations detected were below the EPA Removal Action level guidelines.
7 samples analyzed did not detect any PCBs.

NYC / ER (Dec 11) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Dec 19) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Jan 7 - 10) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)

- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 27 samples were collected from these monitoring sites. A sample was not collected from Site 8 on January 10 due to an equipment malfunction.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 6) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***20.45 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***21.26ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***19.95 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 6) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***29.50 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 7) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***9.23 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.87 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***12.49 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 7) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***17.11 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 8) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***12.35 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.60 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***13.32 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 8) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***23.36 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 9) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***17.38 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***15.82 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***16.05 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 9) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***23.56 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 10) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***18.49 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***18.97 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***18.62 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 10) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***28.54 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 1) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***37.06 ug/m³***.
Chambers St./West St. (Site 2) - No data reported.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***19.8 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***24.0 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***22.71 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 2) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***28.87 ug/m³***.
Chambers St./West St. (Site 2) - 24-hr average concentration for this period was ***24.38 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***19.5 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***21.4 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***20.47 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 3) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***44.80 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***40.39 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***39.4 ug/m³***.

Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***38.8 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***35.61 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 4) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***60.11 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***50.96 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***58.3 ug/m³***.
Canal Street Post Office (Site 4) - No data reported.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***50.96 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 5) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***55.12 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***69.26 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***51.5 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***58.7 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***42.51 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 6) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***47.63 ug/m³***.
Chambers St./West St. (Site 2) - 24-hr average concentration for this period was ***39.48 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***39.5 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***38.6 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***31.41 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 7) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***34.65 ug/m³***.
Chambers St./West St. (Site 2) - 24-hr average concentration for this period was ***15.68 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***24.7 ug/m³***.

Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***23.0 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***22.46 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 8) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***17.22 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***19.22 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***18.0 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***16.6 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***16.35 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 9) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***11.86 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***17.05 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***12.9 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***11.6 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***8.11 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 10) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***21.84 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***26.08 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***25.1 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***24.8 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***18.84 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 11) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***33.53 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***37.44 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - No data reported.

Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***30.8 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***32.20 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 12) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***31.99 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***36.44 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***38.4 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***32.4 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***29.37 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 13) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***47.17 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***41.39 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - No data reported.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***40.9 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***35.4 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC ER (Dec 14) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***36.23 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***37.15 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***40.5 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***32.2 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***35.86 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 15) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***15.35 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***14.18 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***9.8 ug/m³***.

Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***10.2 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***7.74 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 16) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***13.23 ug/m³***.
Chambers St./West St. (Site 2) - No data reported.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***14.6 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***12.2 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***11.73 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Dec 17) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***24.58 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***27.54 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***25.9 ug/m³***.
Canal Street Post Office (Site 4) - 24-hour average concentration for this period was ***25.5 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***20.34 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 11) - Particulate Monitoring (Dataram)

Monitoring of particulate levels at three locations (Stations L, N, R) was not conducted due to the weather conditions.

NYC / ER (Jan 11) - Volatile Organics (Mobile Laboratory)

Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, and South Tower), including in the debris area at ground level.

NYC / ER (Jan 13) - Volatile Organics (Mobile Laboratory)

Benzene was not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.
Aside from two organic compounds identified at one of the locations, no others were detected at any of the four locations above the detection limit (20 ppbv).
Note: Windy conditions existed throughout the day.

Direct Reading Instruments

NYC / ER (Jan 11)

Monitoring was not conducted due to the weather conditions.

NYC / ER (Jan 13)

Nothing of significance reported during the afternoon monitoring period.
No monitoring conducted during the morning due to the weather conditions.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/07/02 1200 to 2359

Data Validation Date: 01/11/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S-f/cc**
01/07/02	RST-02937	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	-	M1	NS	Air	NS	NS	NS	NS	NS	NS
01/07/02	RST-02938	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02939	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02940	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02941	F	661	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/07/02	RST-02942	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02943	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02944	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02945	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02946	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02947	D	267	Air	<7.0	<0.010	0	0	<8.00	<0.0115
01/07/02	RST-02948	K	387	Air	8.92	0.009	0	0	<8.00	<0.0080
01/07/02	RST-02949	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02950	T-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02951	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02952	U-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02953	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02954	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02955	P	712	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02956	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/07/02	RST-02957	W	720	Air	8.28	0.004	3***	3***	53.33	0.0285
01/08/02	FB010802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/08/02	TB010802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
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I: SE corner of Wall St. & Broadway
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-07-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/08/02 0001 to 1200

Data Validation Date: 01/11/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S-f/cc**
01/08/02	RST-02958	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02959	M1	274	Air	<7.0	<0.010	0	0	<8.00	<0.0112
01/08/02	RST-02960	N	596	Air	<7.0	<0.005	0	0	<8.00	<0.0052
01/08/02	RST-02961	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02962	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02963	F	623	Air	<7.0	<0.004	0	0	<8.00	<0.0049
01/08/02	RST-02964	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02965	C	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/08/02	RST-02966	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02967	H	618	Air	<7.0	<0.004	0	0	<8.00	<0.0050
01/08/02	RST-02968	I	651	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/08/02	RST-02969	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02970	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02971	T	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02972	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02973	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02974	V-Duplicate	301	Air	<7.0	<0.009	0	0	<8.00	<0.0102
01/08/02	RST-02975	S	268	Air	<7.0	<0.010	0	0	<8.00	<0.0115
01/08/02	RST-02976	S-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02977	P	314	Air	<7.0	<0.009	0	0	<8.00	<0.0098
01/08/02	-	E	NS	Air	NS	NS	NS	NS	NS	NS
01/08/02	RST-02978	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	FB010802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/08/02	TB010802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
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Key:
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-08-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/08/02 1200 to 2359

Data Validation Date: 01/11/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
01/08/02	RST-02979	L	369	Air	<7.0	<0.007	4***	0	32.[illegible]	0.0334
01/08/02	RST-02980	L-Duplicate	459	Air	<7.0	<0.006	0	0	<3.00	<0.0067
01/08/02	RST-02981	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02982	M1-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02983	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02984	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02985	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02986	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02987	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02988	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02989	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02990	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02991	I	476	Air	<7.0	<0.006	0	0	<8.00	<0.0065
01/08/02	RST-02992	D	720	Air	<7.0	<0.004	0	0	<8.00	<0.0043
01/08/02	RST-02993	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02994	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02995	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02996	V	681	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/08/02	RST-02997	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02998	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-02999	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/08/02	RST-03000	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	FB010902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/09/02	TB010902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Key:
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*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-08-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/09/02 0001 to 1200

Data Validation Date: 01/11/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (f) 0.5µ - 5µ	TEM (AHERA) Structures (f) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
01/09/02	RST-03001	L	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03002	M1	422	Air	<7.0	<0.006	0	0	<8.00	<0.0073
01/09/02	RST-03003	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03004	N-Duplicate	636	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/09/02	RST-03005	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03006	J-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03007	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03008	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03009	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03010	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03011	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03012	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03013	I	717	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03014	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03015	K	662	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/09/02	RST-03016	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03017	U	665	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/09/02	RST-03018	V	700	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/09/02	RST-03019	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03020	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03021	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03022	W	715	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	FB010902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/09/02	TB010902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
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Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-09-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/07/02 1200 to 2400

Data Validation Date: 01/11/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/07/02	7093-18-0102	Park Row	1184***	Air	<7.0	<0.002	0	0	<13.33	<0.0043
01/07/02	7093-19-0102	Chambers Street	1256	Air	<7.0	<0.002	0	0	<16.00	<0.0049
01/07/02	7093-15-0100	Manhattan PS #143	1338	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/07/02	7094-09-0090	Bronx PS #154	1414	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/07/02	7096-12-0096	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/07/02	7095-98-0096	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/07/02	7097-18-0093	Staten Island PS #44	1360	Air	<7.0	<0.002	0	0	<16.00	<0.0045

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted due to no access to station location
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-07-02pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/09/02 1200 to 2359

Data Validation Date: 01/13/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
01/09/02	RST-03023	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03024	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03025	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03026	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03027	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03028	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03029	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03030	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03031	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03032	H	43****	Air	<7.0	<0.063	0	0	<8.00	<0.0716
01/09/02	RST-03033	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03034	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	-	D	NS	Air	NS	NS	NS	NS	NS	NS
01/09/02	RST-03035	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03036	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03037	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03038	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03039	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03040	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03041	P-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03042	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/09/02	RST-03043	W	720	Air	12.74	0.007	0	0	<8.89	<0.0048
01/10/02	FB011002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/10/02	TB011002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
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*** Chrysotile
**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-09-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/10/02 0001 to 1200

Data Validation Date: 01/13/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
01/10/02	RST-03044	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03045	M1	336	Air	<7.0	<0.008	0	0	<8.00	<0.0092
01/10/02	RST-03046	N	333	Air	<7.0	<0.008	0	0	<8.00	<0.0092
01/10/02	RST-03047	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03048	Q	451	Air	<7.0	<0.006	0	0	<8.00	<0.0068
01/10/02	RST-03049	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03050	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03051	C	653	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/10/02	RST-03052	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03053	H	700	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/10/02	RST-03054	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03055	I-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03056	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03057	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03058	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03059	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03060	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03061	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03062	P	691	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/10/02	RST-03063	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03064	E-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	-	W	NS	Air	NS	NS	NS	NS	NS	NS
01/10/02	FB011002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/10/02	TB011002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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FL-01-10-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/10/02 1200 to 2359

Data Validation Date: 01/13/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/10/02	RST-03065	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03066	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03067	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03068	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03069	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03070	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03071	A	720	Air	17.83	0.0095	0	0	<8.89	<0.0048
01/10/02	RST-03072	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03073	C-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03074	B	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/10/02	RST-03075	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03076	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03077	D	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/10/02	RST-03078	K	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/10/02	RST-03079	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03080	U	500	Air	<7.0	<0.005	0	0	<8.00	<0.0062
01/10/02	RST-03081	V	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/10/02	RST-03082	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03083	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/10/02	RST-03084	E	691	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/10/02	RST-03085	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	FB011102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/11/02	TB011102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-10-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/11/02 0001 to 1200

Data Validation Date: 01/13/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
01/11/02	RST-03086	L	702	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/11/02	RST-03087	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03088	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03089	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03090	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03091	F	651	Air	<7.0	<0.004	NA (1)	NA (1)	NA (1)	NA (1)
01/11/02	RST-03092	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03093	C	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/11/02	RST-03094	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03095	B-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03096	H	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03097	I	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/11/02	RST-03098	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03099	D-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03100	K	720	Air	<7.0	<0.004	2***	0	17.78	0.0095
01/11/02	RST-03101	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03102	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03103	V	675	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/11/02	RST-03104	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03105	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03106	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03107	W	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/11/02	RST-03108	A-Duplicate	713	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	FB011102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/11/02	TB011102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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FL-01-11-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/08/02 1200 to 2400

Data Validation Date: 01/13/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc*
01/08/02	7093-18-0103	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/08/02	7093-19-0103	Chambers Street	1362	Air	<7.0	<0.002	0	0	<16.00	<0.0045
01/08/02	7093-15-0101	Manhattan PS #143	1170***	Air	<7.0	<0.002	0	0	<13.33	<0.0044
01/08/02	7094-09-0091	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/08/02	7096-12-0097	Queens PS #199	1100***	Air	<7.0	<0.002	0	0	<13.33	<0.0047
01/08/02	7095-98-0097	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/08/02	7097-18-0094	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

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** Sample volume is based on pump reading
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ext-01-08-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/09/02 1200 to 2400

Data Validation Date: 01/13/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
01/09/02	7093-18-0104	Park Row	1204	Air	<7.0	<0.002	0	0	<13.33	<0.0043
01/09/02	7093-19-0104	Chambers Street	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/09/02	7093-15-0102	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/09/02	7094-09-0092	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/09/02	7096-12-0098	Queens PS #199	1426	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/09/02	7095-98-0098	Brooklyn PS #274	1136***	Air	<7.0	<0.002	0	0	<13.33	<0.0045
01/09/02	7097-18-0095	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

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ext-01-09-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/10/02 1200 to 2400

Data Validation Date: 01/13/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
01/10/02	7093-18-0105	Park Row	1426	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/10/02	7093-19-0105	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/10/02	7093-15-0103	Manhattan PS #143	1128***	Air	<7.0	<0.002	0	0	<13.33	<0.0046
01/10/02	7094-09-0093	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/10/02	7096-12-0099	Queens PS #199	1420	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/10/02	7095-98-0099	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/10/02	7097-18-0096	Staten Island PS #44	NS	Air	NS	NS	NS	NS	NS	NS

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ext-01-10-02pm.xls

Table 1.x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		11609		11610		11599	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		TAGA	
Air Volume (L)		-		-		-		0		0		4860	
Date Collected		-		-		-		10/30/01		10/30/01		10/30/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.26
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.03
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.03
Calcium	ICAP	3.4	2.5	3.3	2.5	3.8	2.5	U	2.5	U	2.5	1.2	0.51
Chromium	ICAP	0.67	0.13	0.65	0.13	0.72	0.13	U	0.13	U	0.13	U	0.03
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	0.68	0.63	0.57	0.13
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.014	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.03
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.03
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Zinc	ICAP	0.39	0.25	0.28	0.25	U	0.25	U	0.25	U	0.25	0.14	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		11600		11601		11602		11603		11604		11605	
Location		TAGA		A-BARCLAY ST. & WEST BROADWAY		B-CHURCH & DEY ST.		LOC 3A PLAZA BETWEEN WTC 4&5		C1-LIBERTY ST. & BROADWAY		D-GREENWICH & ALBANY ST.	
Air Volume (L)		4930		4820		4500		4800		4800		4800	
Date Collected		10/30/01		10/30/01		10/30/01		10/30/01		10/30/01		10/30/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.47	0.25	0.84	0.26	1.1	0.28	1.4	0.26	1.1	0.26	3.6	0.26
Antimony	AA-Fur	U	0.01	U	0.01	0.012	0.01	0.021	0.01	0.02	0.01	0.051	0.01
Arsenic	AA-Fur	U	0.01	U	0.01	U	0.01	0.013	0.01	0.011	0.01	0.028	0.01
Barium	ICAP	0.03	0.025	0.045	0.03	0.063	0.03	0.057	0.03	0.039	0.03	0.091	0.03
Beryllium	ICAP	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01
Cadmium	ICAP	U	0.025	U	0.03	U	0.03	U	0.03	U	0.03	U	0.03
Calcium	ICAP	1.6	0.51	7.5	0.52	10	0.56	18	0.52	15	0.52	50	0.52
Chromium	ICAP	U	0.025	0.036	0.03	0.05	0.03	U	0.03	U	0.03	0.036	0.03
Cobalt	ICAP	U	0.051	U	0.05	U	0.06	U	0.05	U	0.05	U	0.05
Copper	ICAP	U	0.051	0.15	0.05	0.13	0.06	0.22	0.05	0.15	0.05	0.74	0.05
Iron	ICAP	0.82	0.13	1.9	0.13	5.0	0.14	6.6	0.13	5.8	0.13	17	0.13
Lead	AA-Fur	0.021	0.01	0.043	0.01	0.054	0.01	0.11	0.01	0.082	0.01	0.28	0.01
Magnesium	ICAP	U	2.5	U	2.6	U	2.8	U	2.6	U	2.6	3.6	2.6
Manganese	ICAP	U	0.025	U	0.03	0.08	0.03	0.11	0.03	0.078	0.03	0.28	0.03
Nickel	ICAP	U	0.051	U	0.05	U	0.06	U	0.05	U	0.05	0.071	0.05
Potassium	ICAP	U	10	U	10	U	11	U	10	U	10	U	10
Selenium	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01
Silver	ICAP	U	0.025	U	0.03	U	0.03	U	0.03	U	0.03	U	0.03
Sodium	ICAP	U	2.5	U	2.6	U	2.8	U	2.6	U	2.6	U	2.6
Thallium	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01
Vanadium	ICAP	U	0.051	U	0.05	U	0.06	U	0.05	U	0.05	U	0.05
Zinc	ICAP	0.18	0.051	0.26	0.05	0.41	0.06	0.58	0.05	0.54	0.05	1.5	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		11606		11607		11608	
Location		P-ALBANY ST. & SOUTHEND		S-RECTOR PLACE & SOUTHEND		E-LIBERTY ST. & SOUTHEND	
Air Volume (L)		4800		4800		4800	
Date Collected		10/30/01		10/30/01		10/30/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.97	0.26	0.84	0.26	0.95	0.26
Antimony	AA-Fur	U	0.01	U	0.01	U	0.01
Arsenic	AA-Fur	U	0.01	U	0.01	U	0.01
Barium	ICAP	0.046	0.026	0.047	0.03	0.035	0.03
Beryllium	ICAP	U	0.01	U	0.01	U	0.01
Cadmium	ICAP	U	0.026	U	0.03	U	0.03
Calcium	ICAP	7.1	0.52	5.2	0.52	8.9	0.52
Chromium	ICAP	U	0.026	U	0.03	U	0.03
Cobalt	ICAP	U	0.052	U	0.05	U	0.05
Copper	ICAP	0.058	0.052	0.054	0.05	U	0.05
Iron	ICAP	2.5	0.13	2.1	0.13	1.9	0.13
Lead	AA-Fur	0.039	0.01	0.035	0.01	0.03	0.01
Magnesium	ICAP	U	2.6	U	2.6	U	2.6
Manganese	ICAP	0.029	0.026	0.028	0.03	0.026	0.03
Nickel	ICAP	U	0.052	U	0.05	U	0.05
Potassium	ICAP	U	10	U	10	U	10
Selenium	AA-Fur	U	0.01	U	0.01	U	0.01
Silver	ICAP	U	0.026	U	0.03	U	0.03
Sodium	ICAP	U	2.6	U	2.6	U	2.6
Thallium	AA-Fur	U	0.01	U	0.01	U	0.01
Vanadium	ICAP	U	0.052	U	0.05	U	0.05
Zinc	ICAP	0.21	0.052	0.21	0.05	0.19	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 10/30/01

Sample No.	WG6273-1		11587		11588		11589		11590		11591		11592	
Sampling Location	Method Blank		R		R		A		B		Loc 3 A		C	
Sample Volume (L)	0		7149		7149		7260		7200		7200		7200	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of MoCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of DiCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of TrCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of TeCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of PeCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of HxCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of HpCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of OcCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Sum of NoCBs	U	10.0	U	1.40	U	1.40	U	1.38	U	1.39	U	1.39	U	1.39
Total	0		0		0		0		0		0		0	

COC# 04052

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5

Qualifiers
U: denotes not detected
MDL: denotes method detection limit
J: denotes value is below detection limit and is estimated

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NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 10/30/01

Sample No.	11593		11594		11595		11596		11597		11598	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7200		7200		7200		7200		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of MoCBs	1.8	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of DiCBs	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of TrCBs	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of TeCBs	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of PeCBs	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of HxCBs	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of HpCBs	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of OcCBs	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Sum of NoCBs	U	1.39	U	1.39	U	1.39	U	1.39	U	10.0	U	10.0
Total	1.8		0		0		0		0		0	

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/02/01

Sample No.	WG-6280-1P		11623		11624		11625		11626		11627		11628	
Sampling Location	Method Blank		R		R		A		B		3A		C	
Sample Volume (L)	0		7467.5		7210		7105		7335		7350		7305	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.34	U	1.39	U	1.41	U	1.36	U	1.36	U	1.37
Sum of MoCBs	U	10.0	U	1.34	U	1.39	2.59 J	1.41	1.6	1.36	5.62 J	1.36	U	1.37
Sum of DiCBs	U	10.0	U	1.34	U	1.39	1.43	1.41	U	1.36	2.48	1.36	U	1.37
Sum of TrCBs	U	10.0	U	1.34	U	1.39	5.66	1.41	1.74	1.36	10.1	1.36	U	1.37
Sum of TeCBs	U	10.0	U	1.34	U	1.39	U	1.41	U	1.36	U	1.36	U	1.37
Sum of PeCBs	U	10.0	U	1.34	U	1.39	U	1.41	U	1.36	U	1.36	U	1.37
Sum of HxCBs	U	10.0	U	1.34	U	1.39	U	1.41	U	1.36	U	1.36	U	1.37
Sum of HpCBs	U	10.0	U	1.34	U	1.39	U	1.41	U	1.36	U	1.36	U	1.37
Sum of OcCBs	U	10.0	U	1.34	U	1.39	U	1.41	U	1.36	U	1.36	U	1.37
Sum of NoCBs	U	10.0	U	1.34	U	1.39	U	1.41	U	1.36	U	1.36	U	1.37
Total	0		0		0		9.68 J		3.34		18.2 J		0	

COC# 04054

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

Qualifiers
U: denotes not detected
MDL: denotes method detection limit
J: denotes value is below detection limit and is estimated

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NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 11/02/01

Sample No.	11629		11630		11631		11632		11633		11634	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7275		6989		7245		7200		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DcCB	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of MoCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of DiCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of TrCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of TeCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of PeCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of HxCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of HpCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of OcCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Sum of NoCBs	U	1.37	U	1.43	U	1.38	U	1.39	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 04054

Table 1.1 (cont.) Results of the Analysis for PAH in Ai·
WA # 0-0236: NYC ER Site

Sampling Date: 12/19/01				
Sample No.	05950		05965	
Sampling Location	Ξ Liberty St. & South End Ave		Field Blank	
Volume (L)	480		0	
Compound Name	Conc. ppbv	MDL ppbv	Conc. µg	MDL µg
Naphthalene	U	4.3	U	11
2-Methylnaphthalene	U	4.1	U	11
1-Methylnaphthalene	U	4.0	U	11
Biphenyl	U	3.8	U	11
2,6-Dimethylnaphthalene	U	3.8	U	12
Acenaphthylene	U	3.9	U	12
Acenaphthene	U	3.6	U	11
Dibenzofuran	U	3.4	U	11
Fluorene	U	3.5	U	11
Phenanthrene	U	3.1	U	11
Anthracene	U	3.2	U	11
Carbazole	U	3.7	U	12
Fluoranthene	U	2.9	U	12
Pyrene	U	2.8	U	11
Benzo(a)anthracene	U	2.5	U	11
Chrysene	U	2.2	U	10
Benzo(b)fluoranthene	U	2.3	U	11
Benzo(k)fluoranthene	U	2.5	U	12
Benzo(e)pyrene	U	2.3	U	11
Benzo(a)pyrene	U	2.5	U	13
Indeno(1,2,3-cd)pyrene	U	2.6	U	14
Dibenzo(a,h)anthracene	U	2.6	U	14
Benzo(g,h,i)perylene	U	2.4	U	13

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ERTC 1/10/02

U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

12-11-19-01PAH.xls

Table 1.0 Results of the Analysis for Metals in Air
WA # 0.236 New York (WTC) ERTC site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		11573		11574		11563	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		TAGA	
Air Volume (L)		-		-		-		0		0		4728.75	
Date Collected		-		-		-		10/26/01		10/26/01		10/26/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.72	0.26
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.03
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.03
Calcium	ICAP	4.7	2.5	3.0	2.5	3.6	2.5	U	2.5	U	2.5	3.4	0.53
Chromium	ICAP	0.65	0.13	0.74	0.13	0.98	0.13	U	0.13	0.17	0.13	U	0.03
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	1.6	0.13
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.026	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.03
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	11
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.03
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		11564		11565		11566		11567		11568		11569	
Location		TAGA		A-BARCLAY ST. & WEST BROADWAY		B-CHURCH & DEY ST.		LOC 3A BETWEEN WTC 4 + 5		C1-LIBERTY ST. & BROADWAY		D-GREENWICH & ALBANY ST.	
Air Volume (L)		4767.75		4446		4930		4800		6817.5		4830	
Date Collected		10/26/01		10/26/01		10/26/01		10/26/01		10/26/01		10/26/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.4	0.26	2.1	0.28	4.7	0.25	15	0.26	0.83	0.18	1.6	0.26
Antimony	AA-Fur	U	0.01	0.027	0.01	0.049	0.01	0.15	0.01	U	0.0073	U	0.01
Arsenic	AA-Fur	U	0.01	U	0.01	U	0.01	0.022	0.01	U	0.0073	U	0.01
Barium	ICAP	U	0.026	0.066	0.03	0.094	0.03	0.27	0.026	0.036	0.018	0.057	0.03
Beryllium	ICAP	U	0.01	U	0.01	U	0.01	U	0.01	U	0.0073	U	0.01
Cadmium	ICAP	U	0.026	U	0.03	U	0.03	0.029	0.026	U	0.018	U	0.03
Calcium	ICAP	2.4	0.52	41	0.58	86	0.51	300	0.52	7.8	0.37	16	0.52
Chromium	ICAP	U	0.026	U	0.03	U	0.03	0.074	0.026	U	0.018	U	0.03
Cobalt	ICAP	U	0.052	U	0.06	U	0.05	U	0.052	U	0.037	U	0.05
Copper	ICAP	U	0.052	0.27	0.06	0.72	0.05	2.4	0.052	0.043	0.037	0.084	0.05
Iron	ICAP	1.1	0.13	4.2	0.14	7.4	0.13	22	0.13	2.3	0.092	3.8	0.13
Lead	AA-Fur	0.019	0.01	0.14	0.01	0.22	0.01	0.82	0.01	0.054	0.0073	0.069	0.01
Magnesium	ICAP	U	2.6	U	2.8	4.9	2.5	16	2.6	U	1.8	3.1	2.6
Manganese	ICAP	U	0.026	0.074	0.03	0.21	0.03	0.62	0.026	0.047	0.018	0.067	0.03
Nickel	ICAP	U	0.052	U	0.06	U	0.05	0.063	0.052	U	0.037	U	0.05
Potassium	ICAP	U	10	U	11	U	10	U	10	U	7.3	U	10
Selenium	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.01	U	0.0073	U	0.01
Silver	ICAP	U	0.026	U	0.03	U	0.03	U	0.026	U	0.018	U	0.03
Sodium	ICAP	U	2.6	U	2.8	U	2.5	2.8	2.6	U	1.8	U	2.6
Thallium	AA-Fur	U	0.01	U	0.01	U	0.01	U	0.01	U	0.0073	U	0.01
Vanadium	ICAP	U	0.052	U	0.06	U	0.05	U	0.052	U	0.037	U	0.05
Zinc	ICAP	0.21	0.052	0.80	0.06	1.5	0.05	4.7	0.052	0.33	0.037	0.45	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		11570		11571		11572	
Location		P-ALBANY ST. & SOUTH END		F-RECTOR PLACE & SOUTH END		E-LIBERTY ST. & SOUTH END	
Air Volume (L)		4800		4820		4800	
Date Collected		10/26/01		10/26/01		10/26/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.1	0.26	1.4	0.26	1.6	0.26
Antimony	AA-Fur	U	0.01	U	0.01	U	0.01
Arsenic	AA-Fur	U	0.01	U	0.01	U	0.01
Barium	ICAP	0.038	0.026	0.029	0.03	0.033	0.03
Beryllium	ICAP	U	0.01	U	0.01	U	0.01
Cadmium	ICAP	U	0.026	U	0.03	U	0.03
Calcium	ICAP	7.1	0.52	8.8	0.52	9.5	0.52
Chromium	ICAP	U	0.026	U	0.03	U	0.03
Cobalt	ICAP	U	0.052	U	0.05	U	0.05
Copper	ICAP	U	0.052	U	0.05	U	0.05
Iron	ICAP	2.6	0.13	2.3	0.13	2.1	0.13
Lead	AA-Fur	0.038	0.01	0.043	0.01	0.035	0.01
Magnesium	ICAP	U	2.6	U	2.6	U	2.6
Manganese	ICAP	0.058	0.026	0.066	0.03	0.062	0.03
Nickel	ICAP	U	0.052	U	0.05	U	0.05
Potassium	ICAP	U	10	U	10	U	10
Selenium	AA-Fur	U	0.01	U	0.01	U	0.01
Silver	ICAP	U	0.026	U	0.03	U	0.03
Sodium	ICAP	U	2.6	U	2.6	U	2.6
Thallium	AA-Fur	U	0.01	U	0.01	U	0.01
Vanadium	ICAP	U	0.052	U	0.05	U	0.05
Zinc	ICAP	0.34	0.052	0.22	0.05	0.20	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 12, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	36	09:00:00	10	00:15:00	100	0.0	6.0	21.0	534.9
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	34	08:30:00	10	00:15:00	100	0.0	16.6	24.7	103.9
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	34	08:30:00	10	00:15:00	100	0.0	11.1	18.2	52.2

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/13/02

File Name	NYC755	NYC757	NYC758	NYC759	NYC761	NYC760
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07341	A07342	A07344	A07343
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb.	ppb.	ppb.	ppb.	ppb.	ppb.
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	31
MTBE	RL	RL	RL	RL	RL	24
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/11/02

File Name	NYC735	NYC737	NYC738	NYC739	NYC742	NYC740
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07333	A07334	A07335	A07336
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	680	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	720	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	29	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	130	560
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	26	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	27	51
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	28	RL
Tetrahydrofuran	RL	RL	RL	RL	47	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	670	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	75	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	170	22
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	46	RL
Ethylbenzene	RL	RL	RL	RL	180	RL
m&p-Xylenes	RL	RL	RL	RL	35	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	67	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	21	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-13-02 (1100) RST: BROWN

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	1220	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M	1225	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	1230	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
J	1235	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
O	1240	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
P	1242	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
A	1249	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
C	1252	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
B	1255	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
H	1301	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
I	1305	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
D	1310	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
K	1315	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
[illegible]	[illegible]	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
[illegible]	1323	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
T	NOT ACCESSIBLE											
S	1335	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
R	1337	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
E	1342	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, January 15, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 6:00 p.m. on 1/15

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 42 samples taken in and around ground zero on January 11 and January 12. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,769, with 30 samples above the standard (27 of these were collected prior to September 30, the other three were collected on October 9, November 27 and December 27).

Staten Island Landfill:
Air (Asbestos) - Thirty-one air samples collected on January 9 and January 12 were analyzed for asbestos. All were below the school re-entry standard.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 12 and January 14 at Locations L (northeast side of Stuyvesant High School) and Location R (northwest side of Stuyvesant High School), and on January 14 at Location N (south side of Pier 25). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 12 and January 14 at four locations in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

Samples taken at the North Tower debris pile exceeded the OSHA standards for benzene on January 12. Benzene was not detected at the other three locations (EPA's Wash Tent at West & Murray Streets, Austin Tobin Plaza, and the South Tower debris pile).

VOC's were not detected in any of the four ground zero locations on January 14.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 12 and January 14. Other than low levels of carbon monoxide, nothing of significance was noted.

Analysis and quality assurance of the following data, collected in prior months, has recently been completed:

Fresh Kills – Metals

A total of 20 samples were collected on December 10, 15, 19 and 21 at the Fresh Kills Landfill in Staten Island. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Ground Zero – VOC's

A total of 12 samples were collected on December 3, 10 and 17 at or near the debris pile at Ground Zero (South Tower-South Side, North Tower-West Side, North Tower-North Side, and Austin Tobin Plaza). VOCs were either not detected or were below applicable OSHA PELs. The results were also below EPA Removal Action level guidelines.

Stuyvesant High School-Northwest Side – VOC's

A total of 3 samples were collected on December 3, 10 and 17 from a location on the northwest side of Stuyvesant High School. The level of 1,1,2,2-Tetrachloroethane exceeded the EPA Removal Action level guidelines (based on a 30-year exposure) on December 10, however, the level did not exceed the EPA Removal Action level guidelines adjusted to a 1-year exposure duration. (Note that this location was upwind of Ground Zero at the time of this sampling event.) All other VOCs were either not detected or were below the EPA Removal Action level guidelines (based on a 30-year exposure).

Lower Manhattan – Dioxin

A total of 30 samples were collected on December 4, 6 and 11 at various locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Lower Manhattan – Metals

A total of 40 samples were collected on October 26, October 30, December 11 and December 19 at various locations in Lower Manhattan. The level of arsenic nominally exceeded the EPA Removal Action level guidelines (based on a 30-year exposure) at the southeast corner of Church & Dey Streets on December 19. However, the arsenic concentration was below the EPA Removal Action level guidelines adjusted to 1-year exposure, and the NIOSH REL and OSHA PEL. Metals in all other samples were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Lower Manhattan – PCBs

A total of 50 samples were collected on October 30, November 2, and December 6, 11 and 19 at various locations in Lower Manhattan. PCBs were either not detected, or samples contained trace amounts that were well below levels of concern.

Lower Manhattan – Silactes

A total of 10 samples were collected on December 19 at various locations in Lower Manhattan. Silicates were not detected.

Lower Manhattan – PAHs

A total of 20 samples were collected on December 11 and 19 at various locations in Lower Manhattan. PAHs were not detected.

Lower Manhattan/Brooklyn – Particulates (PM_{10})

Sampling for particulates occured on December 1 through December 17 at several locations in Lower Manhattan (Park Row, Chambers & West Streets, Coast Guard Building-Battery Park, and the Canal Street Post Office) as well as one location in Brooklyn (P.S. 274 - 800 Bushwick Avenue). All readings were below the National Ambient Air Quality Standard for PM_{10}.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, January 15, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 11, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
A sample was not submitted for Location T since access to that location was not available.
Note: Low sample volumes recorded.

NYC / ER (Jan 12, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
A sample was not submitted for Location T since access to that location was not available.
Note: Low sample volume recorded.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 9, 0748 - 2220 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
2 samples (Location P-4 and P-8) were not collected due to equipment malfunction.

Fresh Kills (Jan 10)

Results pending.

Fresh Kills (Jan 11)

Results pending.

Fresh Kills (Jan 12, 0741 - 2203 hrs)

All 14 samples analyzed were below the TEM AHERA standard.
A sample was not submitted for Location O-19 since access to that location was not available.
4 samples were not analyzed due to overloading of particulates

Fresh Kills (Jan 13) - Particulate Monitoring (Dataram)

No measurements were conducted due to the weather conditions.

Ambient Air Sampling Locations

NYC / ER (Jan 12) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 9.0 to 145.9 ug/m^3 with an average of 33.5 ug/m^3.
Station R values ranged from 4.2 to 75.0 ug/m^3 with an average of 22.6 ug/m^3.
Note: Measurements were not taken at Location N due to an equipment malfunction.

NYC / ER (Jan 13) - Particulate Monitoring (Dataram)

Monitoring of particulate levels at three locations (Stations L, N, R) was not conducted due to the weather conditions.

NYC / ER (Jan 14) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 8.8 to 87.6 ug/m^3 with an average of 18.3 ug/m^3.
Station R values ranged from 9.8 to 94.9 ug/m^3 with an average of 18.7 ug/m^3.
Station N values ranged from 6.7 to 390.0 ug/m^3 with an average of 14.9 ug/m^3.

NYC / ER (Jan 12) - Volatile Organics (Mobile Laboratory)

Benzene exceeded the OSHA TWA PEL (1 ppm) at one location (North Tower) on the debris pile in the plume at ground level.
Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, and South Tower), including in the debris area at ground level.

NYC / ER (Jan 14) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

Direct Reading Instruments

NYC / ER (Jan 12)

Low levels of carbon monoxide noted at nearly all stations during both monitoring periods.
Otherwise, nothing of significance reported.

NYC / ER (Jan 14)

Low levels of carbon monoxide noted at nearly all stations during the afternoon monitoring period.
Otherwise, nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/11/02 1200 to 2359

Data Validation Date: 01/14/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
01/11/02	RST-03109	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03110	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03111	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03112	M-1 Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03113	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03114	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03115	Q	124****	Air	<7.0	<0.022	0	0	<8.00	<0.0248
01/11/02	RST-03116	F	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/11/02	RST-03117	A	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/11/02	RST-03118	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03119	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03120	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03121	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03122	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03123	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	-	T	NS	Air	NS	NS	NS	NS	NS	NS
01/11/02	RST-03124	U	191****	Air	<7.0	<0.014	0	0	<8.00	<0.0161
01/11/02	RST-03125	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03126	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03127	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03128	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/11/02	RST-03129	W	720	Air	14.65	0.008	0	0	<8.00	<0.0043
01/12/02	FB011202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/12/02	TB011202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V. Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted due to no access to station location

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-11-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/12/02 0001 to 1200

Data Validation Date: 01/14/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
01/12/02	RST-03130	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03131	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03132	N	44****	Air	<7.0	<0.061	0	0	<8.00	<0.0700
01/12/02	RST-03133	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03134	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03135	J-Duplicate	423	Air	7.64	0.007	0	0	<8.00	<0.0073
01/12/02	RST-03136	Q	717	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03137	F	709	Air	<7.0	<0.004	0	0	<8.00	<0.0043
01/12/02	RST-03138	A	645	Air	7.64	0.006	0	0	<8.00	<0.0048
01/12/02	RST-03139	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03140	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03141	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03142	I	666	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/12/02	RST-03143	D	701	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/12/02	RST-03144	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	-	T	NS	Air	NS	NS	NS	NS	NS	NS
01/12/02	RST-03145	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03146	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03147	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03148	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03149	E	695	Air	<7.0	<0.004	0	0	<8.00	<0.0044
01/12/02	RST-03150	W	720	Air	8.92	0.005	0	0	<8.00	<0.0043
01/12/02	FB011202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/12/02	TB011202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center Island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Hellport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

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Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-12-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/09/02 0748 to 2220

Data Validation Date: 01/13/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/09/02	LF02066	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02067	P-2	534	Air	<7.0	<0.005	0	0	<8.75	<0.0063
01/09/02	LF02068	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02069	P-4	NS	Air	NS	NS	NS	NS	NS	NS
01/09/02	LF02070	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02071	P-6	553	Air	<7.0	<0.005	0	0	<8.75	<0.0061
01/09/02	LF02072	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02073	P-8	NS	Air	NS	NS	NS	NS	NS	NS
01/09/02	LF02074	W-11	720	Air	NA(1)	NA(1)	2***	0	17.50	0.0094
01/09/02	LF02075	W-12A	720	Air	15.29	0.008	3***	2***	43.74	0.0234
01/09/02	LF02076	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02077	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02078	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02079	T-15	720	Air	11.46	0.006	0	0	<8.75	<0.0047
01/09/02	LF02080	T-16	720	Air	15.29	0.008	0	0	<8.75	<0.0047
01/09/02	LF02081	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02082	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02083	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/09/02	LF02084	MPHS-20	720	Air	NA(1)	NA(1)	0	0	<8.75	<0.0047
01/09/02	LF02085	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/09/02	LF02086	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
NA(3) - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-09-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/12/02 0741 to 2203

Data Validation Date: 01/14/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/12/02	LF02129	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02130	P-2	450	Air	<7.0	<0.006	0	0	<7.87	<0.0067
01/12/02	LF02131	P-3	720	Air	<7.0	<0.004	3***	0	26.25	0.0140
01/12/02	LF02132	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02133	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02134	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02135	P-7	573	Air	<7.0	<0.005	0	0	<7.87	<0.0053
01/12/02	LF02136	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02137	W-11	720	Air	10.19	0.005	NA(1)	NA(1)	NA(1)	NA(1)
01/12/02	LF02138	W-12A	720	Air	28.03	0.015	NA(1)	NA(1)	NA(1)	NA(1)
01/12/02	LF02139	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02140	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02141	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02142	T-15	720	Air	45.86	0.025	NA(1)	NA(1)	NA(1)	NA(1)
01/12/02	LF02143	T-16	720	Air	12.74	0.007	0	0	<8.75	<0.0047
01/12/02	LF02144	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02145	O-18	720	Air	<7.0	<0.004	NA(1)	NA(1)	NA(1)	NA(1)
01/12/02	LF02146	O-19	NS	Air	NS	NS	NS	NS	NS	NS
01/12/02	LF02147	MPHS-20	719	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02148	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/12/02	LF02149	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
NA(3) - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-12-02-am.xls

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United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Rob Tichenor / John Lien

U.S. EPA: Norrell

Date: 1-14 02

RST Site Project Manager: Brennan

Location	R	~~N~~ L	~~L~~ N			
DataRAM ID No.	2607	2646	2647			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0802	0806	0820 ~~0806~~			
Stop Time	1406	1410 ~~1400~~*	1413			
Run Time (Minutes)	363.5	363.5	352.5			
Minimum Concentration (ug/m3)	9.8	8.8	6.7			
Maximum Concentration (ug/m3)	94.9	87.6	390.0			
Average Concentration (TWA) (ug/m3)	18.7	18.3	14.9			

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: B. Hoffman

Date: 11/12/02

U.S. EPA: Norrell

RST Site Project Manager: Brennan

Location	L	R	N			
DataRAM ID No.	2646	2647				
Flow Rate (Liters / Minute)	2 L/m	2 L/m				
Start Time	0811	0811				
Stop Time	1407	1405				
Run Time (Minutes)	352.5	353.5				
Minimum Concentration (ug/m3)	9.0	4.2				
Maximum Concentration (ug/m3)	145.9	75.0				
Average Concentration (TWA) (ug/m3)	33.5	22.6				

DATARAM DIED DURING SETUP. DATARAM WAS NOT RUN AT THIS LOCATION TODAY.

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Early

E: 1/12/12 (N.M) (Early)

RST: B. Hoffman

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	0818	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND
M1	0825	ND	ND	20.3	3	ND	ND	ND	ND	ND	ND	ND
N	0830	ND	ND	20.4	1	ND	ND	ND	ND	ND	ND	ND
J	0840	ND	ND	20.4	3	ND	ND	ND	ND	ND	ND	ND
Q	0845	ND	ND	20.4	3	ND	ND	ND	ND	ND	ND	ND
F	0850	ND	ND	20.4	5	ND	ND	ND	ND	ND	ND	ND
A	0900	ND	ND	20.4	5	ND	ND	ND	ND	ND	ND	ND
C	0902	ND	ND	20.4	3	ND	ND	ND	ND	ND	ND	ND
B	0910	ND	ND	20.4	1	ND	ND	ND	ND	ND	ND	ND
H	0915	ND	ND	20.4	2	ND	ND	ND	ND	ND	ND	ND
I	0925	ND	ND	20.4	2	ND	ND	ND	ND	ND	ND	ND
D	0940	ND	ND	20.4	4	ND	ND	ND	ND	ND	ND	ND
K	0950	ND	ND	20.4	5	ND	ND	ND	ND	ND	ND	ND
T	0955	NO ACCESS										
U	0955	ND	ND	20.4	4	ND	ND	ND	ND	ND	ND	ND
V	1000	ND	ND	20.4	3	ND	ND	ND	ND	ND	ND	ND
S	1005	ND	ND	20.4	4	ND	ND	ND	ND	ND	ND	ND
P	1010	0.1	ND	20.4	8	ND	ND	ND	ND	ND	ND	ND
E	1020	ND	ND	20.4	3	ND	ND	ND	ND	ND	ND	ND

HF, HCl, $COCl_2$ - SPM

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Late

DATE: 1/12/02 (W.M.) (LATE)

RST: B. Hoffman

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	1205	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
M1	1210	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
N	1215	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
J	1220	ND	ND	20.8	1	ND	ND	ND	ND	ND	ND	ND
O	1225	ND	ND	20.8	3	ND	ND	ND	ND	ND	ND	ND
F	1227	ND	ND	20.8	2	ND	ND	ND	ND	ND	ND	ND
A	1232	ND	ND	20.8	2	ND	ND	ND	ND	ND	ND	ND
C	1237	ND	ND	20.8	3	ND	ND	ND	ND	ND	ND	ND
B	1241	ND	ND	20.8	1	ND	ND	ND	ND	ND	ND	ND
H	1250	0.1	ND	20.8	3	ND	ND	ND	ND	ND	ND	ND
I	1255	ND	ND	20.8	2	ND	ND	ND	ND	ND	ND	ND
D	1300	ND	ND	20.8	1	ND	ND	ND	ND	ND	ND	ND
K	1304	ND	ND	20.8	1	ND	ND	ND	ND	ND	ND	ND
T	1307	NO	ACCESS									
U	1309	ND	ND	20.8	5	ND	ND	ND	ND	ND	ND	ND
V	1315	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
S	1330	ND	ND	20.8	1	ND	ND	ND	ND	*	ND	ND
P	1338	ND	ND	20.8	ND	ND	ND	ND	ND	*	ND	ND
E	1345	ND	ND	20.8	ND	ND	ND	ND	ND	*	ND	ND

* Battery Dead

HCl, HF, $COCl_2$ - SPM

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-14-02 A.M. RST: Rob Tichenor

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
N	0821	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M	0812	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
L	0807	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
J	0825	ND	ND	21.6	ND	ND	ND	ND	ND	ND	ND	ND
Q	0830	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
F	0836	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
A	0846	ND	ND	21.1	5	ND	ND	ND	ND	ND	ND	ND
C	0854	ND	ND	21.1	5	ND	ND	ND	ND	ND	ND	ND
B	0900	ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
H	0909	ND	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
I	0917	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
D	0925	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
K	0934	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
T	0941	ND	ND	21.2	6	ND	ND	ND	ND	ND	ND	ND
U	0948	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
V	0959	0.1*	ND	21.3	6	ND	ND	ND	ND	ND	ND	ND
S	1018	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
P	1024	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
E	1028	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND

* Gasoline smell. idling truck.

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1 14 02 PM RST: Rob Tichenor

Location	Time	FID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	1220	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M	1222	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
N	1225	0.3	ND	21.1	6	ND	ND	ND	ND	ND	ND	ND
J	1229	ND	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
Q	1232	ND	ND	21.1	5	ND	ND	ND	ND	ND	ND	ND
F	1234	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
A	1245	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
C	1249	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
B	1251	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
H	1303	ND	ND	21.2	6	ND	ND	ND	ND	ND	ND	ND
I	1305	ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
D	1313	ND	ND	21.2	6	ND	ND	ND	ND	ND	ND	ND
K	1317	ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
T	1322	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
U	1325	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
V	1327	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
S	1332	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
P	1335	0.1	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
E	1337	ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/12/02

File Name	NYC747	NYC748	NYC749	NYC750	NYC752	NYC751
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07337	A07338	A07340	A07339
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**1000**	**79**
Chlorodifluoromethane	RL	RL	RL	RL	RL	**24**
Dichlorodifluoromethane	RL	RL	RL	RL	RL	**51**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**2200**	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	**42**	RL
Chloroethane	RL	RL	RL	RL	**60**	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	**27**
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**530**	**32**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**200**
MTBE	RL	RL	RL	RL	RL	**110**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**52**	**52**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**120**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	**26**	RL
Tetrahydrofuran	RL	RL	RL	RL	**140**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	**50**
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**1200**	RL
Heptane	RL	RL	RL	RL	**36**	**36**
Trichloroethene	RL	RL	RL	RL	**28**	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	**33**	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**260**	**47**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	**21**	**23**
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	**67**	RL
Ethylbenzene	RL	RL	RL	RL	**260**	RL
m&p-Xylenes	RL	RL	RL	RL	**38**	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	**290**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	**28**	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/14/02

File Name	NYC765	NYC766	NYC767	NYC768	NYC770	NYC769
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07345	A07346	A07347	A07348
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
O-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, January 16, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:30 p.m. on 1/16

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 42 samples taken in and around ground zero on January 12 and January 13. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,769, with 30 samples above the standard (27 of these were collected prior to September 30, the other three were collected on October 9, November 27 and December 27).

Staten Island Landfill:
Air (Asbestos) - Thirty-seven air samples collected on January 10 and January 11 were analyzed for asbestos. The sample collected from the Indoor Wash Station (Location W-12A) on January 11 exceeded the TEM AHERA standard. EPA will work with other responsible agencies to examine the wash process for possible operational sources of the exceedance, and take any necessary corrective action. All other samples were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 14 at the Staten Island Landfill. There were no significant readings.

Air (Metals) - Five samples were collected on December 27 and analyzed for metals. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 15 at Location L (northeast side of Stuyvesant High School), Location N (south side of Pier 25) and Location R (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

PCBs - A total of 19 samples were collected on December 27 and January 3 at various locations in Lower Manhattan. PCBs were either not detected, or samples contained trace amounts that were well below levels of concern.

Silactes - A total of 20 samples were collected on December 27 and January 3 at various locations in Lower Manhattan. Silicates were not detected.

Dioxin - A total of 30 samples were collected on November 15, December 19 and December 27 at various locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Metals - A total of 20 samples were collected on December 27 and January 3 at various locations in Lower Manhattan. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 12 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of benzene on January 12.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 15. Other than low levels of carbon monoxide, nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, January 16, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 12, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
Location T was not sampled since access to that location was not available.

NYC / ER (Jan 13, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
Location T was not sampled since access to that location was not available.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 10, 0745 - Jan 11, 0210)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Jan 11, 0800 - 2225 hrs)

1 of 18 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at indoor "Wash" Location W-12A ($166.23\ S/mm^2$).
1 sample (Location P-4) was not submitted for analysis.

Fresh Kills (Dec 27) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills (Jan 14) - Particulate Monitoring (Dataram)

Nothing of significance reported at two stations (P-2 and P-6) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Dec 3) - Volatile Organic Compounds

Analytical data is attached for results previously presented on the Friday, January 11 Sampling Situation Report.

NYC / ER (Nov 15) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Although the sample at Location 3B appears to be equal to the EPA Removal Action level guideline (based on a 30-year exposure), elevated levels of dioxin identified in the quality control (QC) samples (blanks) indicate that dioxin is not present in the air sample from Location B at levels sufficiently above those in the control samples to be considered a valid result. In addition, all of the other air samples collected during this round also indicate that dioxin is not present at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Dec 19) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Elevated levels of dioxin identified in the quality control (QC) samples (blanks) indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Dec 27) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Elevated levels of dioxin identified in the quality control (QC) samples (blanks) indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Dec 27) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 3, 2002) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Arsenic was detected at Location D at a concentration of 0.04 ug/m^3. The EPA Removal Action level guideline (based on a 30-year exposure) is 0.041 ug/m^3.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Dec 27) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Jan 3, 2002) - PCBs

All 9 samples analyzed did not detect any PCBs.
1 sample was not submitted for analysis since the cartridge was damaged.

NYC / ER (Dec 27) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Jan 3, 2002) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Jan 15) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 8.5 to 342.0 ug/m^3 with an average of 135.2 ug/m^3.
Station N values ranged from 4.0 to 241.8 ug/m^3 with an average of 103.1 ug/m^3.
Station R values ranged from 0.0 to 279.1 ug/m^3 with an average of 132.6 ug/m^3.

NYC / ER (Jan 12) - Volatile Organics (Mobile Laboratory)

Benzene was not detected above the detection limit (20 ppbv) at any of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

Direct Reading Instruments

NYC / ER (Jan 15)

Low levels of carbon monoxide noted at nearly all stations during both monitoring periods.
Otherwise, nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/12/02 1200 to 2359

Data Validation Date: 01/15/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
01/12/02	RST-03151	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03152	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03153	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03154	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03155	Q	500	Air	<7.0	<0.005	0	0	<8.00	<0.0062
01/12/02	RST-03156	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03157	A	720	Air	14.01	0.007	2***	0	17.78	0.0095
01/12/02	RST-03158	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03159	B	489	Air	<7.0	<0.006	0	0	<8.00	<0.0063
01/12/02	RST-03160	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03161	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03162	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03163	I-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03164	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03165	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03166	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03167	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03168	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03169	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/12/02	RST-03170	E	693	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/12/02	RST-03171	W	720	Air	19.11	0.010	0	0	<8.89	<0.0048
01/13/02	FB011302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/13/02	TB011302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-12-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/13/02 0001 to 1200

Data Validation Date: 01/15/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
01/13/02	RST-03172	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03173	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03174	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03175	J	435	Air	<7.0	<0.006	0	0	<8.89	<0.0071
01/13/02	RST-03176	Q	677	Air	<7.0	<0.004	1***	0	8.00	0.0045
01/13/02	RST-03177	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03178	A	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/13/02	RST-03179	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03180	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03181	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03182	I	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03183	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03184	K	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/13/02	RST-03185	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03186	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03187	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03188	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03189	P-Duplicate	348	Air	<7.0	<0.008	1***	0	8.00	0.0089
01/13/02	RST-03190	E	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03191	E-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03192	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	FB011302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/13/02	TB011302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-13-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/10/02 0745 to 01/11/02 0210

Data Validation Date: 01/14/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/10/02	LF02087	P-1	646	Air	<7.0	<0.004	0	0	<7.87	<0.0047
01/10/02	LF02088	P-2	471	Air	<7.0	<0.006	0	0	<8.75	<0.0072
01/10/02	LF02089	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02090	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02091	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02092	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02093	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02094	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02095	W-11	720	Air	11.46	0.006	2***	0	17.50	0.0094
01/10/02	LF02096	W-12A	720	Air	30.57	0.016	2***	0	17.50	0.0094
01/10/02	LF02097	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02098	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02099	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02100	T-15	720	Air	34.39	0.018	2***	0	17.50	0.0094
01/10/02	LF02101	T-16	720	Air	15.29	0.008	0	0	<8.75	<0.0047
01/10/02	LF02102	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02103	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02104	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02105	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/10/02	LF02106	Lot Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)
01/10/02	LF02107	Trip Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-10-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/11/02 0800 to 2225

Data Validation Date: 01/15/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/11/02	LF02108	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02109	P-2	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02110	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02111	P-4	NS	Air	NS	NS	NS	NS	NS	NS
01/11/02	LF02112	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02113	P-6	641	Air	<7.0	<0.004	0	0	<7.87	<0.0047
01/11/02	LF02114	P-7	688	Air	<7.0	<0.004	0	0	<8.75	<0.0049
01/11/02	LF02115	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02116	W-11	720	Air	19.11	0.010	3***	2***	43.74	0.0234
01/11/02	LF02117	W-12A	720	Air	16.56	0.009	18***	1***	166.23	0.0889
01/11/02	LF02118	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02119	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02120	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02121	T-15	720	Air	64.97	0.035	2***	0	17.50	0.0094
01/11/02	LF02122	T-16	720	Air	8.92	0.005	0	0	<8.75	<0.0047
01/11/02	LF02123	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02124	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02125	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02126	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/11/02	LF02127	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/11/02	LF02128	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
NA(3) - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-11-02-am.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 14, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	32	15:00:00	10	00:15:00	100	0.0	0.0	4.3	163.6
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	2226	1	22	05:30:00	10	00:15:00	100	0.0	0.0	12.3	37.6
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2011	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/27/01 0730 to 1500

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
12/27/01	11483	A	1000	Air	<0.01	<0.02	<0.02
12/27/01	11484	3B	1000	Air	<0.01	<0.02	<0.02
12/27/01	11485	B	1000	Air	<0.01	<0.02	<0.02
12/27/01	11486	C	1000	Air	<0.01	<0.02	<0.02
12/27/01	11487	D	1000	Air	<0.01	<0.02	<0.02
12/27/01	11490	E	1000	Air	<0.01	<0.02	<0.02
12/27/01	11488	P	1000	Air	<0.01	<0.02	<0.02
12/27/01	11489	S	1000	Air	<0.01	<0.02	<0.02
12/27/01	11481	TAGA	1000	Air	<0.01	<0.02	<0.02
12/27/01	11482	TAGA	1000	Air	<0.01	<0.02	<0.02

coc# 04890

NS: Not sampled

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
Location 3B Church & Vesey

ERT 1/15/02

NIOSH 7500: Silica crystalline by XRD

FL-12-27-01silica.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 1/03/02 0730 to 1500

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
1/3/02	06023	A	1000	Air	<0.01	<0.02	<0.02
1/3/02	06024	3B	1000	Air	<0.01	<0.02	<0.02
1/3/02	06025	B	1000	Air	<0.01	<0.02	<0.02
1/3/02	06026	C	1000	Air	<0.01	<0.02	<0.02
1/3/02	06027	D	1000	Air	<0.01	<0.02	<0.02
1/3/02	06030	E	1000	Air	<0.01	<0.02	<0.02
1/3/02	06028	P	1000	Air	<0.01	<0.02	<0.02
1/3/02	06029	S	1000	Air	<0.01	<0.02	<0.02
1/3/02	06021	TAGA	1000	Air	<0.01	<0.02	<0.02
1/3/02	06022	TAGA	1000	Air	<0.01	<0.02	<0.02

coc# 04897

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
Location 3B Church & Vesey

NS: Not sampled

ERT 1/15/02

NIOSH 7500: Silica crystalline by XRD

FL-1-03-02silica.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/27/01

Sample No.	WG7024-1			11461			11462			11463			11464			11465			11466		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			6960			5790			7200			6720			5790			7230		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0029	U		0.0035	U		0.0028	U		0.0030	U		0.0035	U		0.0028
12378-PeCDD	U		0.10	U		0.014	U		0.017	U		0.014	U	0.0003	0.015	U	0.0001	0.017	U		0.014
123478-HxCDD	U		0.10	U		0.014	U		0.017	U		0.014	U		0.015	U		0.017	U		0.014
123678-HxCDD	U		0.10	U		0.014	U		0.017	U		0.014	U		0.015	U		0.017	U		0.014
123789-HxCDD	U		0.10	U		0.014	U		0.017	U		0.014	U		0.015	U		0.017	U		0.014
1234678-HpCDD	U	0.0106	0.10	U		0.014	U		0.017	U		0.014	U		0.015	U		0.017	U		0.014
OCDD	0.189 J		0.20	U		0.029	U		0.035	U		0.028	U		0.030	U	0.0169	0.035	U		0.028
2378-TCDF	U		0.020	U		0.0029	U		0.0035	U	0.0003	0.0028	U		0.0030	U		0.0035	U		0.0028
12378-PeCDF	U		0.10	U		0.014	U		0.017	U		0.014	U		0.015	U		0.017	U		0.014
23478-PeCDF	U		0.10	U		0.014	U		0.017	U		0.014	U		0.015	U		0.017	U		0.014
123478-HxCDF	U		0.10	U		0.014	U		0.017	U		0.014	U	0.0002	0.015	U		0.017	U		0.014
123678-HxCDF	U		0.10	U		0.014	U		0.017	U		0.014	U	0.0002	0.015	U		0.017	U		0.014
234678-HxCDF	U		0.10	U		0.014	U		0.017	U		0.014	U		0.015	U		0.017	U		0.014
123789-HxCDF	U		0.10	U		0.014	U		0.017	U		0.014	U	0.0002	0.015	U		0.017	U		0.014
1234678-HpCDF	U		0.10	U		0.014	U		0.017	U	0.0008	0.014	U		0.015	U		0.017	U		0.014
1234789-HpCDF	U		0.10	U		0.014	U		0.017	U		0.014	U		0.015	U	0.0002	0.017	U		0.014
OCDF	U		0.20	U	0.0009	0.029	U		0.035	U	0.0007	0.028	U	0.0006	0.030	U	0.0005	0.035	U		0.028
Total TCDDs	U			U			U			0.0014			0.0012			U			0.0003		
Total PeCDDs	U			U			U			0.0013			0.0007			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	0.0146			U			0.0018			0.0017			0.0014			0.0015			0.0010		
Total TCDFs	U			U			U			0.0020			U			U			U		
Total PeCDFs	U			U			U			0.0002			U			U			U		
Total HxCDFs	U			0.0002			U			U			U			U			U		
Total HpCDFs	U			U			U			0.0003			U			0.0004			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0002			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0402			0.0004			0.0004			0.0008			0.0003			0.0003			0.0002		

COC# 04892
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/14/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

12-27-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/27/01

Sample No.	11467			11468			11469			11470			05861			05862		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7200			1320			5805			7230			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0028	U		0.015	U		0.0034	U		0.0028	U		0.020	U		0.020
12378-PeCDD	U		0.014	U	0.0004	0.076	U		0.017	U		0.014	U		0.10	U		0.10
123478-HxCDD	U	0.0001	0.014	U		0.076	U		0.017	U		0.014	U		0.10	U		0.10
123678-HxCDD	U	0.0002	0.014	U		0.076	U	0.0002	0.017	U		0.014	U	0.0013	0.10	U	0.0014	0.10
123789-HxCDD	U	0.0002	0.014	U		0.076	U		0.017	U		0.014	U	0.0010	0.10	U	0.0010	0.10
1234678-HpCDD	U		0.014	U		0.076	U		0.017	U		0.014	0.0081 J		0.10	U	0.0054	0.10
OCDD	U		0.028	U		0.15	U		0.034	U		0.028	U		0.20	0.0314 J		0.20
2378-TCDF	U		0.0028	U		0.015	U		0.0034	U		0.0028	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.075	U		0.017	U		0.014	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.075	U		0.017	U		0.014	U		0.10	U		0.10
123478-HxCDF	0.0002 J		0.014	U	0.0005	0.075	U		0.017	U	0.0001	0.014	U	0.0006	0.10	U	0.0005	0.10
123678-HxCDF	U	0.0001	0.014	U	0.0003	0.075	0.0001 J		0.017	U	0.0001	0.014	U	0.0010	0.10	U	0.0005	0.10
234678-HxCDF	U	0.0001	0.014	U	0.0004	0.075	U		0.017	U	0.0002	0.014	U	0.0004	0.10	U		0.10
123789-HxCDF	U		0.014	U		0.075	U		0.017	U		0.014	0.0009 J		0.10	U		0.10
1234678-HpCDF	U		0.014	U		0.075	U		0.017	U	0.0003	0.014	0.0018 J		0.10	U	0.0010	0.10
1234789-HpCDF	U		0.014	U		0.075	U		0.017	U		0.014	U	0.0016	0.10	U		0.10
OCDF	0.0007		0.028	U	0.0013	0.15	U		0.034	U		0.028	U	0.0030	0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	0.0003			U			U			0.0002			U			U		
Total HxCDDs	0.0002			U			U			U			U			U		
Total HpCDDs	U			U			0.002			U			0.0081			U		
Total TCDFs	U			U			U			0.0001			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	0.0003			U			0.0001			0.0001			0.0013			U		
Total HpCDFs	U			U			0.0004			U			0.0018			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0002			0.0000		
TEQ (ND=1/2)	0.0002			0.0011			0.0002			0.0002			0.0398			0.0401		

COC# 04892

12-27-01dioatr.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/27/01

Sample No.	WG-7024-1P		11461		11462		11463		11464		11465		11466	
Sampling Location	Method Blank		R		R		A		3B		B		C	
Sample Volume (L)	0		6960		5790		7200		6720		5790		7230	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of MoCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of DiCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of TrCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of TeCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of PeCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of HxCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of HpCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of OcCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Sum of NoCBs	U	10.0	U	1.44	U	1.73	U	1.39	U	1.49	U	1.73	U	1.38
Total	0		0		0		0		0		0		0	

COC# 04892

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 1/14/02

12-27-01PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 12/27/01

Sample No.	11467		11468		11469		11470		05861		05862	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7200		1320		5805		7230		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of MoCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of DiCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of TrCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of TeCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of PeCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of HxCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of HpCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of OcCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Sum of NoCBs	U	1.39	U	7.58	U	1.72	U	1.38	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 04892

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/03/02

Sample No.	WG-7028-1P		05991		05993		05994		05995		05996	
Sampling Location	Method Blank		R		A		3B		B		C	
Sample Volume (L)	0		5280		5685		7200		5805		7200	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of MoCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of DiCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of TrCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of TeCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of PeCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of HxCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of HpCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of OcCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Sum of NoCBs	U	10.0	U	1.89	U	1.76	U	1.39	U	1.72	U	1.39
Total	0		0		0		0		0		0	

COC# 04898

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5 U: denotes not detected
Loc 3A: Between WTC4 & MDL: denotes method detection limit
Loc 3B: Church & Vesey

ERT: 1/14/02

1-03-02PCBair.xls

Sampling Date 1/03/02

Sample No.	05997		05998		05999		06000		06031		06032	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	5565		6405		6630		7230		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of MoCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of DiCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of TrCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of TeCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of PeCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of HxCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of HpCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of OcCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Sum of NoCBs	U	1.80	U	1.56	U	1.51	U	1.38	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 04898

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0048		WTC-0049		WTC-0043	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		O-17	
Air Volume (L)		-		-		-		0		0		3560	
Date Collected		-		-		-		12/27/01		12/27/01		12/27/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.54	0.35
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.014
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.014
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.035
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.014
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.035
Calcium	ICAP	4.4	2.5	5.0	2.5	4.8	2.5	U	2.5	U	2.5	2.2	0.7
Chromium	ICAP	0.82	0.13	0.94	0.13	0.73	0.13	U	0.13	U	0.13	U	0.035
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.07
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.07	0.07
Iron	ICAP	1.2	0.63	U	0.63	U	0.63	U	0.63	U	0.63	1.2	0.18
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.03	0.014
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	3.5
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.035
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.07
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	14
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.014
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.035
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	3.5	3.5
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.014
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.07
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.15	0.07

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1 x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0044		WTC-0045		WTC-0046		WTC-0047	
Location		O-18		O-19		P-5		P-8	
Air Volume (L)		4626.5		4680		6213		3690	
Date Collected		12/27/01		12/27/01		12/27/01		12/27/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.27	0.27	0.37	0.27	U	0.20	0.88	0.32
Antimony	AA-Fur	U	0.011	U	0.011	U	0.008	U	0.013
Arsenic	AA-Fur	U	0.011	U	0.011	U	0.008	U	0.013
Barium	ICAP	U	0.027	U	0.027	U	0.02	U	0.032
Beryllium	ICAP	U	0.011	U	0.011	U	0.008	U	0.013
Cadmium	ICAP	U	0.027	U	0.027	U	0.02	U	0.032
Calcium	ICAP	1.1	0.54	1.8	0.53	0.46	0.40	3.3	0.64
Chromium	ICAP	U	0.027	U	0.027	U	0.02	U	0.032
Cobalt	ICAP	U	0.054	U	0.053	U	0.04	U	0.064
Copper	ICAP	U	0.054	U	0.053	U	0.04	U	0.064
Iron	ICAP	0.69	0.14	0.52	0.13	0.21	0.10	1.4	0.16
Lead	AA-Fur	0.022	0.011	0.02	0.011	0.01	0.008	0.11	0.013
Magnesium	ICAP	U	2.7	U	2.7	U	2.0	U	3.2
Manganese	ICAP	U	0.027	U	0.027	U	0.02	0.032	0.032
Nickel	ICAP	U	0.054	U	0.053	U	0.04	U	0.064
Potassium	ICAP	U	11	U	11	U	8.0	U	13
Selenium	AA-Fur	U	0.011	U	0.011	U	0.008	U	0.013
Silver	ICAP	U	0.027	U	0.027	U	0.02	U	0.032
Sodium	ICAP	U	2.7	U	2.7	U	2.0	U	3.2
Thallium	AA-Fur	U	0.011	U	0.011	U	0.008	U	0.013
Vanadium	ICAP	U	0.054	U	0.053	U	0.04	U	0.064
Zinc	ICAP	0.083	0.054	0.069	0.053	0.052	0.04	0.12	0.064

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		05863		05864		11491	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		TAGA	
Air Volume (L)		-		-		-		0		0		3660	
Date Collected		-		-		-		12/27/01		12/27/01		12/27/01	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.35	0.34
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.04	U	0.014
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.04	U	0.014
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.034
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.014
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.034
Calcium	ICAP	4.4	2.5	5.0	2.5	4.8	2.5	U	2.5	U	2.5	1.8	0.68
Chromium	ICAP	0.82	0.13	0.94	0.13	0.73	0.13	U	0.13	U	0.13	U	0.034
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.068
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.068
Iron	ICAP	1.2	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.98	0.17
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.04	0.022	0.014
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	3.4
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.034
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.068
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	14
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.04	U	0.014
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.034
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	3.4
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.04	U	0.014
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.068
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.099	0.068

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

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Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		11492		11493		11494		11495		11496		11497	
Location		TAGA		A-BARCLAY ST. & WEST BROADWAY		LOC 3B CHURCH & VESEY ST		B-CHURCH & DEY ST.		C -LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.	
Air Volume (L)		3950		4080		300		4260		3830		4800	
Date Collected		12/27/01		12/27/01		12/27/01		12/27/01		12/27/01		12/27/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.37	0.32	3.1	0.31	U	4.2	1.5	0.29	2.0	0.33	0.78	0.26
Antimony	AA-Fur	U	0.013	0.013	0.012	U	0.17	U	0.012	U	0.013	U	0.01
Arsenic	AA-Fur	U	0.013	0.012	0.012	U	0.17	U	0.012	U	0.013	U	0.01
Barium	ICAP	U	0.032	0.07	0.031	U	0.42	0.042	0.029	0.065	0.033	0.031	0.026
Beryllium	ICAP	U	0.013	U	0.012	U	0.17	U	0.012	U	0.013	U	0.01
Cadmium	ICAP	U	0.032	U	0.031	U	0.42	U	0.029	U	0.033	U	0.026
Calcium	ICAP	1.6	0.63	32	0.61	29	8.3	15	0.59	19	0.65	4.6	0.52
Chromium	ICAP	U	0.032	0.046	0.031	U	0.42	U	0.029	U	0.033	U	0.026
Cobalt	ICAP	U	0.063	U	0.061	U	0.83	U	0.059	U	0.065	U	0.052
Copper	ICAP	U	0.063	0.25	0.061	U	0.83	0.11	0.059	0.13	0.065	0.065	0.052
Iron	ICAP	1.4	0.16	12	0.15	11	2.1	5.6	0.15	6.2	0.16	1.5	0.13
Lead	AA-Fur	0.025	0.013	0.19	0.012	0.75	0.17	0.088	0.012	0.099	0.013	0.031	0.01
Magnesium	ICAP	U	3.2	5.4	3.1	U	42	U	2.9	3.7	3.3	U	2.6
Manganese	ICAP	U	0.032	0.19	0.031	U	0.42	0.11	0.029	0.10	0.033	0.035	0.026
Nickel	ICAP	U	0.063	U	0.061	U	0.83	U	0.059	U	0.065	U	0.052
Potassium	ICAP	U	13	U	12	U	170	U	12	U	13	U	10
Selenium	AA-Fur	U	0.013	U	0.012	U	0.17	U	0.012	U	0.013	U	0.01
Silver	ICAP	U	0.032	U	0.031	U	0.42	U	0.029	U	0.033	U	0.026
Sodium	ICAP	4.2	3.2	4.3	3.1	U	42	4.8	2.9	8.7	3.3	4.6	2.6
Thallium	AA-Fur	U	0.013	U	0.012	U	0.17	U	0.012	U	0.013	U	0.01
Vanadium	ICAP	U	0.063	U	0.061	U	0.83	U	0.059	U	0.065	U	0.052
Zinc	ICAP	0.14	0.063	1.3	0.061	0.96	0.83	0.28	0.059	0.33	0.065	0.14	0.052

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		11498		11499		11500	
Location		P-ALBANY ST. & SOUTH END AVE		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		3840		4480		4290	
Date Collected		12/27/01		12/27/01		12/27/01	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.9	0.33	1.7	0.28	1.5	0.29
Antimony	AA-Fur	U	0.013	U	0.011	U	0.012
Arsenic	AA-Fur	U	0.013	U	0.011	U	0.012
Barium	ICAP	0.053	0.033	0.048	0.028	0.034	0.029
Beryllium	ICAP	U	0.013	U	0.011	U	0.012
Cadmium	ICAP	U	0.033	U	0.028	U	0.029
Calcium	ICAP	12	0.65	7.6	0.56	7.1	0.58
Chromium	ICAP	U	0.033	U	0.028	U	0.029
Cobalt	ICAP	U	0.065	U	0.056	U	0.058
Copper	ICAP	0.15	0.065	0.084	0.056	0.07	0.058
Iron	ICAP	5.4	0.16	5.8	0.14	2.6	0.15
Lead	AA-Fur	0.055	0.013	0.044	0.011	0.037	0.012
Magnesium	ICAP	4.0	3.3	U	2.8	U	2.9
Manganese	ICAP	0.081	0.033	0.08	0.028	0.066	0.029
Nickel	ICAP	U	0.065	U	0.056	U	0.058
Potassium	ICAP	U	13	U	11	U	12
Selenium	AA-Fur	U	0.013	U	0.011	U	0.012
Silver	ICAP	U	0.033	U	0.028	U	0.029
Sodium	ICAP	17	3.3	5.7	2.8	3.4	2.9
Thallium	AA-Fur	U	0.013	U	0.011	U	0.012
Vanadium	ICAP	U	0.065	U	0.056	U	0.058
Zinc	ICAP	0.21	0.065	0.22	0.056	0.14	0.058

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		06033		06034		06001	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		TAGA	
Air Volume (L)		-		-		-		0		0		3900	
Date Collected		-		-		-		01/03/02		01/03/02		01/03/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.32
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.013
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.013
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.032
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.013
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.032
Calcium	ICAP	3.3	2.5	3.5	2.5	3.8	2.5	U	2.5	U	2.5	0.77	0.64
Chromium	ICAP	0.68	0.13	0.80	0.13	0.88	0.13	U	0.13	0.14	0.13	U	0.032
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.064
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.064
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.93	0.16
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.013
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	3.2
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.032
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.064
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	13
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.013
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.032
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	3.2
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.013
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.064
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.064

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06002		06003		06004		06005		06006		06007	
Location		TAGA		A-BARCLAY ST. & WEST BROADWAY		LOC 3B CHURCH & VESEY ST		B-CHURCH & DEY ST.		C -LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.	
Air Volume (L)		3500		4800		4140		4070		4760		3330	
Date Collected		01/03/02		01/03/02		01/03/02		01/03/02		01/03/02		01/03/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.36	0.47	0.26	1.2	0.30	3.0	0.31	1.8	0.26	2.4	0.38
Antimony	AA-Fur	U	0.014	U	0.01	U	0.012	U	0.012	U	0.011	0.049	0.015
Arsenic	AA-Fur	U	0.014	U	0.01	U	0.012	0.014	0.012	U	0.011	0.04	0.015
Barium	ICAP	U	0.036	0.035	0.026	0.037	0.03	0.094	0.031	0.041	0.026	0.063	0.038
Beryllium	ICAP	U	0.014	U	0.01	U	0.012	U	0.012	U	0.011	U	0.015
Cadmium	ICAP	U	0.036	U	0.026	U	0.03	U	0.031	U	0.026	U	0.038
Calcium	ICAP	1.1	0.71	4.0	0.52	16	0.60	34	0.61	23	0.53	26	0.75
Chromium	ICAP	U	0.036	U	0.026	0.032	0.03	0.054	0.031	0.054	0.026	U	0.038
Cobalt	ICAP	U	0.071	U	0.052	U	0.06	U	0.061	U	0.053	U	0.075
Copper	ICAP	U	0.071	0.054	0.052	0.12	0.06	0.17	0.061	0.087	0.053	0.49	0.075
Iron	ICAP	0.71	0.18	1.9	0.13	6.7	0.15	11	0.15	6.0	0.13	21	0.19
Lead	AA-Fur	0.026	0.014	0.038	0.01	0.086	0.012	0.18	0.012	0.063	0.011	0.19	0.015
Magnesium	ICAP	U	3.6	U	2.6	U	3.0	6.9	3.1	U	2.6	U	3.8
Manganese	ICAP	U	0.036	0.029	0.026	0.10	0.03	0.17	0.031	0.12	0.026	0.29	0.038
Nickel	ICAP	U	0.071	U	0.052	U	0.06	U	0.061	U	0.053	0.086	0.075
Potassium	ICAP	U	14	U	10	U	12	U	12	U	11	U	15
Selenium	AA-Fur	U	0.014	U	0.01	U	0.012	U	0.012	U	0.011	U	0.015
Silver	ICAP	U	0.036	U	0.026	U	0.03	U	0.031	U	0.026	U	0.038
Sodium	ICAP	U	3.6	3.0	2.6	9.0	3.0	92	3.1	11	2.6	10	3.8
Thallium	AA-Fur	U	0.014	U	0.01	U	0.012	U	0.012	U	0.011	U	0.015
Vanadium	ICAP	U	0.071	U	0.052	U	0.06	U	0.061	U	0.053	U	0.075
Zinc	ICAP	U	0.071	0.089	0.052	0.45	0.06	0.56	0.061	0.36	0.053	2.2	0.075

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06008		06009		06010	
Location		P-ALBANY ST. & SOUTH END AVE		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		3300		4720		4050	
Date Collected		01/03/02		01/03/02		01/03/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.2	0.38	0.96	0.26	0.49	0.31
Antimony	AA-Fur	U	0.015	U	0.011	U	0.012
Arsenic	AA-Fur	U	0.015	U	0.011	U	0.012
Barium	ICAP	0.055	0.038	0.049	0.026	U	0.031
Beryllium	ICAP	U	0.015	U	0.011	U	0.012
Cadmium	ICAP	U	0.038	U	0.026	U	0.031
Calcium	ICAP	9.4	0.76	6.0	0.53	5.0	0.62
Chromium	ICAP	U	0.038	U	0.026	U	0.031
Cobalt	ICAP	U	0.076	U	0.053	U	0.062
Copper	ICAP	0.08	0.076	0.061	0.053	U	0.062
Iron	ICAP	4.2	0.19	3.6	0.13	1.9	0.15
Lead	AA-Fur	0.052	0.015	0.047	0.011	0.024	0.012
Magnesium	ICAP	U	3.8	U	2.6	U	3.1
Manganese	ICAP	0.059	0.038	0.051	0.026	U	0.031
Nickel	ICAP	U	0.076	U	0.053	U	0.062
Potassium	ICAP	U	15	U	11	U	12
Selenium	AA-Fur	U	0.015	U	0.011	U	0.012
Silver	ICAP	U	0.038	U	0.026	U	0.031
Sodium	ICAP	53	3.8	24	2.6	17	3.1
Thallium	AA-Fur	U	0.015	U	0.011	U	0.012
Vanadium	ICAP	U	0.076	U	0.053	U	0.062
Zinc	ICAP	0.15	0.076	0.12	0.053	0.085	0.062

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for VOC In Air (Summa)
WA # 0-235 NYC-WTC

Sampling Date 12/03/01														
Sample Number	Method Blank #1		01-0133		01-0157		Method Blank #2		01-0182		01-0209		01-0225	
Sample Location	0112058-06A		Austin Tobin Plaza -Inside		Location R		0112058-06B		South Tower- South Side		North Tower-West Side		North Tower-North Side	
Dilution Factor	1.0		1.49		1.71		1.0		1.44		1.55		1.41	
	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv	Result ppbv	MDL ppbv
Freon 12	U	0.50	2.8	0.74	U	0.86	U	0.50	0.96	0.72	1.5	0.65	1.2	0.70
Freon 114	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Chloromethane	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	7.1 J	0.70
Vinyl Chloride	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Bromomethane	U	0.50	U	0.74	U	0.86	U	0.50	U J	0.72	U J	0.65	0.79 J	0.70
Chloroethane	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Freon 11	U	0.50	1.9	0.74	U	0.86	U	0.50	U	0.72	1.1	0.65	0.82	0.70
1,1-Dichloroethene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Freon 113	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Methylene Chloride	U	0.50	U	0.74	U	0.86	U	0.50	0.94	0.72	0.62	0.65	1.0	0.70
1,1-Dichloroethane	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
cis-1,2-Dichloroethene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Chloroform	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
1,1,1-Trichloroethane	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Carbon Tetrachloride	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Benzene	U	0.50	1.2	0.74	U	0.86	U	0.50	1.4	0.72	1.2	0.65	5.8	0.70
1,2-Dichloroethane	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Trichloroethene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
1,2-Dichloropropane	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
cis-1,3-Dichloropropene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Toluene	U	0.50	2.5	0.74	1.8	0.86	U	0.50	3.7	0.72	2.8	0.65	5.5	0.70
trans-1,3-Dichloropropene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
1,1,2-Trichloroethane	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Tetrachloroethene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Ethylene Dibromide	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Chlorobenzene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Ethyl Benzene	U	0.50	U	0.74	U	0.86	U	0.50	0.80	0.72	U	0.65	4.1	0.70
m,p-Xylene	U	0.50	2.1	0.74	0.94	0.86	U	0.50	2.8	0.72	1.9	0.65	2.1	0.70
o-Xylene	U	0.50	0.83	0.74	U	0.86	U	0.50	1.0	0.72	0.81	0.65	0.9	0.70
Styrene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	0.94	0.70
1,1,2,2-Tetrachloroethane	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
1,3,5-Trimethylbenzene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
1,2,4-Trimethylbenzene	U	0.50	U	0.74	U	0.86	U	0.50	0.81	0.72	0.92	0.65	U	0.70
1,3-Dichlorobenzene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
1,4-Dichlorobenzene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Chlorotoluene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
1,2-Dichlorobenzene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
1,2,4-Trichlorobenzene	U	0.50	U J	0.74	U J	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Hexachlorobutadiene	U	0.50	U	0.74	U	0.86	U	0.50	U	0.72	U	0.65	U	0.70
Propylene	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.6	U	2.8
1,3-Butadiene	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
Acetone	U	2.0	6.0	3.0	4.0	3.4	U	2.0	9.1	2.9	8.3	2.8	14	2.8
Carbon Disulfide	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
2-Propanol	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
trans-1,2-Dichloroethene	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
Vinyl Acetate	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
2-Butanone (Methyl Ethyl Ketone)	U	2.0	U	3.0	U	3.4	U	2.0	3.4	2.9	U	2.8	3.7	2.8
Hexane	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
Tetrahydrofuran	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
Cyclohexane	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
1,4-Dioxane	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
Bromodichloromethane	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
4-Methyl-2-pentanone	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
2-Hexanone	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
Dibromochloromethane	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
Bromoform	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
4-Ethyltoluene	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8
Ethanol	U	2.0	6.7	3.0	5.8	3.4	U	2.0	7.8	2.9	7.4	2.8	6.7	2.8
Methyl-tert-Butyl Ether	U	2.0	U	3.0	U	3.4	U	2.0	4.8	2.9	3.0 J	2.9	U	2.8
Heptane	U	2.0	U	3.0	U	3.4	U	2.0	U	2.9	U	2.8	U	2.8

U denotes less than the MDL (not detected)
J denotes value is below the detection limit and is estimated.

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/19/01

Sample No.	WG7013-1			05921			05922			05923			05924			05925			05926		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			7200			6915			7275			7365			7320			6465		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0028	U		0.0029	U		0.0027	U		0.0027	U		0.0027	U		0.0031
12378-PeCDD	U		0.10	U		0.014	U	0.0001	0.014	U	0.0003	0.014	U	0.0003	0.014	U	0.0004	0.014	U		0.015
123478-HxCDD	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.015
123678-HxCDD	U		0.10	U		0.014	U		0.014	U	0.0005	0.014	U		0.014	U		0.014	U		0.015
123789-HxCDD	U		0.10	U		0.014	U		0.014	U	0.0002	0.014	U		0.014	U	0.0003	0.014	U		0.015
1234678-HpCDD	0.0046 J		0.10	U		0.014	U	0.0008	0.014	U		0.014	U	0.0009	0.014	U		0.014	U		0.015
OCDD	U	0.0323	0.20	U		0.028	U		0.029	U		0.027	U		0.027	U		0.027	U		0.031
2378-TCDF	U		0.020	U		0.0028	U		0.0029	0.0007 J		0.0027	0.0005 J		0.0027	0.0008 J		0.0027	U		0.0031
12378-PeCDF	U		0.10	U		0.014	U		0.014	0.0004 J		0.014	U		0.014	U		0.014	U		0.015
23478-PeCDF	U		0.10	U		0.014	U		0.014	0.0005 J		0.014	U		0.014	U	0.0007	0.014	U		0.015
123478-HxCDF	U		0.10	0.0001 J		0.014	U		0.014	0.0004 J		0.014	U	0.0002	0.014	0.0005 J		0.014	U	0.0002	0.015
123678-HxCDF	0.0009 J		0.10	U	0.0001	0.014	U		0.014	U	0.0004	0.014	U	0.0002	0.014	0.0005 J		0.014	U	0.0002	0.015
234678-HxCDF	U	0.0008	0.10	U	0.0001	0.014	U		0.014	0.0004 J		0.014	U	0.0002	0.014	0.0007 J		0.014	U	0.0001	0.015
123789-HxCDF	0.0006 J		0.10	U		0.014	U		0.014	0.0002 J		0.014	U		0.014	U		0.014	U	0.0001	0.015
1234678-HpCDF	U	0.0022	0.10	U		0.014	0.0003 J		0.014	0.0011 J		0.014	U	0.0006	0.014	0.0020 J		0.014	0.0007 J		0.015
1234789-HpCDF	U		0.10	U	0.0002	0.014	U		0.014	0.0002 J		0.014	U		0.014	0.0003 J		0.014	U		0.015
OCDF	U	0.0032	0.20	U	0.0006	0.028	U	0.0006	0.029	U	0.0008	0.027	U	0.0007	0.027	U	0.0013	0.027	U	0.0009	0.031
Total TCDDs	U			U			U			0.0033			0.0055			0.0115			0.0010		
Total PeCDDs	U			U			U			0.0015			0.0004			0.0076			U		
Total HxCDDs	U			U			U			0.0005			0.0017			0.0085			U		
Total HpCDDs	0.0065			0.0004			U			0.0008			U			U			0.0006		
Total TCDFs	U			U			U			0.0083			0.0045			0.0106			U		
Total PeCDFs	U			U			U			0.0018			U			0.0036			U		
Total HxCDFs	0.0015			0.0001			U			0.0018			0.0004			0.0038			0.0003		
Total HpCDFs	0.0011			U			0.0003			0.0011			U			0.0023			0.0007		
Total Adjusted Conc																					
TEQ (ND=0)	0.0002			0.0000			0.0000			0.0005			0.0001			0.0003			0.0000		
TEQ (ND=1/2)	0.0380			0.0003			0.0004			0.0007			0.0004			0.0006			0.0003		

COC# 04884
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/10/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

12-19-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 12/19/01

Sample No.	05927			05928			05929			05930			05961			05962		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	6435			7515			7560			6495			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0031	U		0.0027	U		0.0026	U		0.0031	U		0.020	U		0.020
12378-PeCDD	U		0.016	U		0.013	U		0.013	U		0.015	U		0.10	U		0.10
123478-HxCDD	U		0.016	U		0.013	U		0.013	U		0.015	U		0.10	U		0.10
123678-HxCDD	U		0.016	U		0.013	U		0.013	U		0.015	U		0.10	0.0023 J		0.10
123789-HxCDD	U		0.016	0.0002 J		0.013	U		0.013	U		0.015	U		0.10	U		0.10
1234678-HpCDD	U		0.016	U		0.013	U		0.013	U		0.015	U		0.10	0.0098 J		0.10
OCDD	U		0.031	U		0.027	U		0.026	U		0.031	U		0.20	0.0426 J		0.20
2378-TCDF	U		0.0031	U		0.0027	U		0.0026	U		0.0031	U		0.020	U		0.020
12378-PeCDF	U		0.016	U		0.013	U		0.013	U		0.015	U		0.10	U		0.10
23478-PeCDF	U		0.016	U		0.013	U		0.013	U		0.015	U		0.10	U		0.10
123478-HxCDF	U		0.016	U		0.013	U		0.013	0.0001 J		0.015	U		0.10	U		0.10
123678-HxCDF	U		0.016	U	0.0001	0.013	U	0.0001	0.013	U	0.0001	0.015	U		0.10	U		0.10
234678-HxCDF	U		0.016	U		0.013	U		0.013	U	0.0001	0.015	U		0.10	U		0.10
123789-HxCDF	U		0.016	U		0.013	U		0.013	U		0.015	U		0.10	U		0.10
1234678-HpCDF	U		0.016	U	0.0003	0.013	0.0002 J		0.013	U	0.0002	0.015	U		0.10	U		0.10
1234789-HpCDF	U		0.016	U		0.013	U		0.013	U		0.015	U		0.10	U		0.10
OCDF	U	0.0006	0.031	U	0.0004	0.027	U	0.0004	0.026	U		0.031	U	0.004	0.20	0.0045 J		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			0.0002			U			U		
Total HxCDDs	U			0.0006			U			U			U			0.0023		
Total HpCDDs	0.0006			0.0005			0.0004			U			0.0117			0.0098		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			U			0.0002			U			U		
Total HpCDFs	U			U			0.0002			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0004		
TEQ (ND=1/2)	0.0003			0.0003			0.0003			0.0003			0.0400			0.0400		

COC# 04884

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NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 11/15/01

Sample No.	WG6301-1			11281			11282			11283			11284			11285		
Sampling Location	Method Blank			R- TAGA			R- TAGA			A-Barclay & West Broadway			B-Church & Day St.			Loc 3B Church & Vesey		
Volume (Liters)	0			7515			7515			7350			7365			7350		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0027
12378-PeCDD	U	0.0175	0.10	U		0.013	U		0.013	U		0.014	U		0.014	U		0.014
123478-HxCDD	U	0.0142	0.10	U		0.013	U		0.013	U		0.014	U		0.014	U		0.014
123678-HxCDD	0.0157J		0.10	0.0010 J		0.013	0.0009 J		0.013	0.0029 J		0.014	0.0040 J		0.014	0.0034 J		0.014
123789-HxCDD	0.0187 J		0.10	U	0.0011	0.013	U		0.013	0.0018 J		0.014	0.0024 J		0.014	0.0023 J		0.014
1234678-HpCDD	0.0281 J		0.10	U		0.013	U		0.013	U		0.014	0.0200		0.014	0.0204		0.014
OCDD	0.0690 J		0.20	U		0.027	U		0.027	U		0.027	U		0.027	U		0.027
2378-TCDF	U		0.020	U		0.0027	U		0.0027	0.0020 J		0.0027	0.0023 J		0.0027	0.0018 J		0.0027
12378-PeCDF	0.0153 J		0.10	U		0.013	U		0.013	U		0.014	U		0.014	U		0.014
23478-PeCDF	0.0138 J		0.10	U		0.013	U		0.013	U		0.014	U		0.014	U		0.014
123478-HxCDF	U	0.0139	0.10	U		0.013	U		0.013	U		0.014	U		0.014	U		0.014
123678-HxCDF	U	0.0152	0.10	U		0.013	U		0.013	U		0.014	U		0.014	U		0.014
234678-HxCDF	U	0.0150	0.10	0.0009 J		0.013	0.0008 J		0.013	U	0.0021	0.014	0.0033 J		0.014	0.0030 J		0.014
123789-HxCDF	U	0.0270	0.10	U		0.013	U		0.013	U		0.014	U		0.014	U		0.014
1234678-HpCDF	U	0.0168	0.10	U	0.0013	0.013	U	0.0008	0.013	0.0049 J		0.014	0.0100 J		0.014	0.0097 J		0.014
1234789-HpCDF	U	0.0170	0.10	U	0.0013	0.013	U		0.013	0.0008 J		0.014	0.0013 J		0.014	U		0.014
OCDF	U	0.0566	0.20	0.0047 J		0.027	U	0.0036	0.027	0.0041 J		0.027	0.0069 J		0.027	0.0055 J		0.027
Total TCDDs	U			U			U			0.310			0.286			0.294		
Total PeCDDs	U			U			U			0.143			0.199			0.191		
Total HxCDDs	0.0344			0.0020			0.0009			0.0994			0.168			0.155		
Total HpCDDs	0.0281			U			0.0021			0.0266			0.0482			0.0456		
Total TCDFs	U			U			U			0.103			0.101			0.0859		
Total PeCDFs	0.0350			0.0025			U			0.0246			0.0393			0.0314		
Total HxCDFs	U			0.0047			0.0035			0.0117			0.0312			0.0228		
Total HpCDFs	U			U			U			0.0058			0.0135			0.0097		
Total Adjusted Conc																		
TEQ (ND=0)	0.0115			0.0002			0.0002			0.0007			0.0016			0.0016		
TEQ (ND=1/2)	0.0155			0.0019			0.0012			0.0040			0.0034			0.0054		

COC# 04138
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 12/11/01

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

11-15-01dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 11/15/01

Sample No.	11286			11287			11288			11289			11290			11285			11286		
Sampling Location	C Liberty St. & Church			D-Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7365			7350			7365			7305			7275			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	0.0128 J		0.10
123478-HxCDD	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	0.0126 J		0.10
123678-HxCDD	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U	0.0140	0.10
123789-HxCDD	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U	0.0123	0.10
1234678-HpCDD	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	0.0239 J		0.10
OCDD	U		0.027	U		0.027	U		0.027	U		0.027	U		0.027	U		0.20	0.0498 J		0.20
2378-TCDF	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.020	U	0.0023	0.020
12378-PeCDF	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	0.0127 J		0.10
23478-PeCDF	U	0.0011	0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	0.0118 J		0.10
123478-HxCDF	U	0.0013	0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	0.0096 J		0.10
123678-HxCDF	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	0.0126 J		0.10
234678-HxCDF	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U	0.0029	0.10	U	0.0106	0.10
123789-HxCDF	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	0.0229 J		0.10
1234678-HpCDF	0.0038 J		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U	0.0116	0.10
1234789-HpCDF	U		0.014	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U	0.0141	0.10
OCDF	U	0.0032	0.027	U		0.027	U		0.027	U		0.027	U		0.027	U		0.20	U	0.0297	0.20
Total TCDDs	0.0660			U			U			0.0004			U			U			U		
Total PeCDDs	0.0457			U			U			U			U			U			0.0209		
Total HxCDDs	0.0275			U			U			U			U			U			0.0126		
Total HpCDDs	0.0146			U			U			U			U			U			0.0425		
Total TCDFs	0.0226			U			U			U			U			U			U		
Total PeCDFs	0.0064			U			U			U			U			U			0.0358		
Total HxCDFs	0.0029			U			U			U			U			U			0.0452		
Total HpCDFs	0.0038			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0001			0.0000			0.0000			0.0000			0.0000			0.0000			0.0190		
TEQ (ND=1/2)	0.0018			0.0008			0.0008			0.0008			0.0008			0.0069			0.0232		

COC# 04138

11-15-01dioair.xls

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Rob T. John L. B.J. Hallman

U.S. EPA: Norrell

Date: 1-15-02

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2646	2647	2607			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0751	0755	0806			
Stop Time	1351	1355	1357			
Run Time (Minutes)	360	360	350			
Minimum Concentration (ug/m3)	0.0	8.5 (N.M) ~~135.2~~	4.0			
Maximum Concentration (ug/m3)	279.1	342.0	241.8			
Average Concentration (TWA) (ug/m3)	132.6	135.2 (N.M) ~~25~~	103.1			

Un[illegible] States Environmental Protection A[illegible]ncy
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Early

DATE: 1-15-02 A.M.

RST: Rob Tiemer, John Lee, Z.J. Hoffman

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
~~K~~ L	0755	ND	1	21.4	ND	ND	ND	ND	ND	ND	ND	ND
M1	0803	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
N	0810	ND	ND	20.7	ND	ND	ND	ND	ND	ND	ND	ND
J	0815	ND	ND	20.7	1	ND	ND	ND	ND	ND	ND	ND
Q	0823	ND	ND	20.5	4	ND	ND	ND	ND	ND	ND	ND
F	0825	ND	ND	20.4	3	ND	ND	ND	ND	ND	ND	ND
A	0834	ND	ND	20.4	3	ND	ND	ND	ND	ND	ND	ND
C	0842	ND	ND	20.3	3	ND	ND	ND	ND	ND	ND	ND
B	0848	ND	ND	20.3	2	ND	ND	ND	ND	ND	ND	ND
H	0857	ND	ND	20.2	3	ND	ND	ND	ND	ND	ND	ND
I	0902	ND	ND	20.2	5	ND	ND	ND	ND	ND	ND	ND
D	0908	ND	ND	20.2	4	ND	ND	ND	ND	ND	ND	ND
K	0913	.4	ND	20.2	3	ND	ND	ND	ND	ND	ND	ND
T	0917	ND	ND	20.2	5	ND	ND	ND	ND	ND	ND	ND
U	0920	ND	ND	20.2	4	ND	ND	ND	ND	ND	ND	ND
V	0922	ND	ND	20.3	4	ND	ND	ND	ND	ND	ND	ND
S	0942	ND	ND	20.9	4	ND	ND	ND	ND	ND	ND	ND
P	0946	ND	ND	20.4	11	ND	ND	ND	ND	ND	ND	ND
E	0951	ND	ND	20.4	7	ND	ND	ND	ND	ND	ND	ND

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Late

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/15/02 RST: B. Hoffman

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	1158	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
M1	1203	ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
N	1206	ND	ND	20.9	3	ND	ND	ND	ND	ND	ND	ND
J	1210	ND	ND	20.9	4	ND	ND	ND	ND	ND	ND	ND
Q	1212	ND	ND	20.8	8	ND	ND	ND	ND	ND	ND	ND
F	1214	ND	ND	20.8	4	ND	ND	ND	ND	ND	ND	ND
A	1220	ND	ND	20.8	10	ND	ND	ND	ND	ND	ND	ND
C	1224	ND	ND	20.8	7	ND	ND	ND	ND	ND	ND	ND
B	1226	ND	ND	20.8	1	ND	ND	ND	ND	ND	ND	ND
H	1239	ND	ND	20.7	7	ND	ND	ND	ND	ND	ND	ND
I	1242	ND	ND	20.7	5	ND	ND	ND	ND	ND	ND	ND
D	1250	ND	ND	20.7	4	ND	ND	ND	ND	ND	ND	ND
K	1258	ND	ND	20.8	2	ND	ND	ND	ND	ND	ND	ND
T	1300	ND	ND	20.8	6	ND	ND	ND	ND	ND	ND	ND
U	1303	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
V	1305	ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
S	1319	ND	ND	21.0	5	ND	ND	ND	ND	ND	ND	ND
P	1323	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
E	1326	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND

Brian J. Hoffman

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/15/02

File Name	NYC773	NYC774	NYC775	NYC776	NYC778	NYC777
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07349	A07350	A07352	A07351
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	**88**	RL
Acetone	RL	RL	RL	RL	**460**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**23**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**58**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	**29**	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	**49**	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**29**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	**22**	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	**22**	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	**55**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, January 17, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 6:00 p.m. on 1/17

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 41 samples taken in and around ground zero on January 13 and January 14. EPA also sampled for asbestos at two additional lower Manhattan locations on January 11 and January 12. All but one sample showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. One sample, taken on January 14 at Location V (Pier 6 Bus Sign), showed 72 structures per square millimeter, slightly above the AHERA standard. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,814, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 11 and January 12. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - Fifteen air samples collected on January 13 were analyzed for asbestos. All samples were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 15 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 16 at Location L (northeast side of Stuyvesant High School), Location N (south side of Pier 25) and

Location R (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 16 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOCs on January 16.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 16. Other than low levels of carbon monoxide, nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, January 17, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 13, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location N) was not collected due to an equipment malfunction.
1 location (Location T) was not sampled since access was not available.
Note: Includes results for Location T from Jan 12 (0001 - 1122 hrs).

NYC / ER (Jan 14, 0001 - 1200 hrs)

1 of 20 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location V-duplicate (72 S/mm^2).
Note: The other (co-located) sample collected at Location V contained 8.89 S/mm^2.
1 sample (Location W) was not collected due to an equipment malfunction.
1 location (Location T) was not sampled since access was not available.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 13, 0734 - 2155)

All 15 samples analyzed were below the TEM AHERA standard.
4 samples (Locations W-11, W-12A, B-14, and T-16) were not analyzed due to overloading of particulates.
1 location (Location O-19) was not sampled since access was not available.
Note: Windy conditions existed throughout the day.
Note: Includes results for Location O-19 from Jan 12 (1013 - 2213 hrs).

Fresh Kills (Jan 15) - Particulate Monitoring (Dataram)

Nothing of significance reported at one station (P-2) based on daily average concentrations.
Limited monitoring due to equipment malfunctions.

Ambient Air Sampling Locations

NYC / ER (Jan 11 - 12) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 12 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
Samples were not collected from Sites 7 and 8 on January 12 due to equipment

malfunctions.

NYC / ER (Jan 16) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6 to 6½ hours.
Station L values ranged from 0.0 to 96.6 ug/m^3 with an average of 8.9 ug/m^3.
Station N values ranged from 0.0 to 117.3 ug/m^3 with an average of 6.9 ug/m^3.
Station R values ranged from 0.0 to 121.5 ug/m^3 with an average of 10.1 ug/m^3.

NYC / ER (Jan 16) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

Direct Reading Instruments

NYC / ER (Jan 16)

Low levels of carbon monoxide noted at all stations during the morning monitoring period.
Otherwise, nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/13/02 1200 to 2359 and 01/12/02 0001 to 1122 [a]

Data Validation Date: 01/15/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/13/02	RST-03193	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03194	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	-	N	NS	Air	NS	NS	NS	NS	NS	NS
01/13/02	RST-03195	J	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/13/02	RST-03196	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03197	Q-Duplicate	648	Air	<7.0	<0.004	1***	0	8.00	0.0048
01/13/02	RST-03198	F	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/13/02	RST-03199	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03200	C	720	Air	9.55	0.005	0	0	<8.89	<0.0048
01/13/02	RST-03201	B	720	Air	15.29	0.008	0	0	<8.89	<0.0048
01/13/02	RST-03202	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03203	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03204	D	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/13/02	RST-03205	K	711	Air	8.92	0.005	0	0	<8.89	<0.0048
01/12/02	RST-03206	T [a]	682	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/13/02	RST-03207	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03208	U-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03209	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03210	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03211	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03212	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/13/02	RST-03213	W	720	Air	8.28	0.004	1***	0	8.89	0.0048
01/14/02	FB011402	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
01/14/02	TB011402	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
(a) - Sample RST-03206 was collected 01/12/02 from 0001 to 1122

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-13-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/14/02 0001 to 1200

Data Validation Date: 01/16/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	t/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/14/02	RST-03214	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03215	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03216	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03217	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03218	Q	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/14/02	RST-03219	F	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/14/02	RST-03220	F-Duplicate	397	Air	<7.0	<0.007	0	0	<8.00	<0.0078
01/14/02	RST-03221	A	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/14/02	RST-03222	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03223	B	720	Air	12.74	0.007	0	0	<8.89	<0.0048
01/14/02	RST-03224	H	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/14/02	RST-03225	I	681	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/14/02	RST-03226	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03227	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03228	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03229	V	719	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/14/02	RST-03230	V-Duplicate	668	Air	<7.0	<0.004	9***	0	72.00	0.0415
01/14/02	RST-03231	S	704	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/14/02	RST-03232	P	685	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/14/02	RST-03233	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	-	W	NS	Air	NS	NS	NS	NS	NS	NS
01/14/02	FB011402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/14/02	TB011402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-14-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/13/02 0734 to 2155[a]

Data Validation Date: 01/15/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/13/02	LF02150	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02151	P-2	310	Air	<7.0	<0.009	0	0	<7.87	<0.0098
01/13/02	LF02152	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02153	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02154	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02155	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02156	P-7	579	Air	<7.0	<0.005	0	0	<7.87	<0.0052
01/13/02	LF02157	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02158	W-11	720	Air	17.83	0.010	NA [1]	NA [1]	NA [1]	NA [1]
01/13/02	LF02159	W-12A	720	Air	24.20	0.013	NA [1]	NA [1]	NA [1]	NA [1]
01/13/02	LF02160	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02161	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02162	B-14	720	Air	<7.0	<0.004	NA [1]	NA [1]	NA [1]	NA [1]
01/13/02	LF02163	T-15	720	Air	8.92	0.005	0	0	<8.75	<0.0047
01/13/02	LF02164	T-16	720	Air	<7.0	<0.004	NA [1]	NA [1]	NA [1]	NA [1]
01/13/02	LF02165	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02166	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/12/02	LF02167[a]	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02168	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/13/02	LF02169	Lot Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
01/13/02	LF02170	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
NA[3] - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted
[a] - Sample LF02167 was collected on 01/12/2002 1013 to 2213

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-13-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/11/02 1200 to 2400

Data Validation Date: 01/15/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/11/02	7093-18-0106	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/11/02	7093-19-0106	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/11/02	7093-15-0104	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/11/02	7094-09-0094	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/11/02	7096-12-0100	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/11/02	7095-98-0100	Brooklyn PS #274	1090***	Air	<7.0	<0.002	0	0	<13.33	<0.0047
01/11/02	7097-18-0097	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-11-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/12/02 1200 to 2400

Data Validation Date: 01/15/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
01/12/02	7093-18-0107	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/12/02	7093-19-0107	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/12/02	7093-15-0105	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/12/02	7094-09-0095	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/12/02	7096-12-0101	Queens PS #199	1098***	Air	<7.0	<0.002	0	0	<13.33	<0.0047
01/12/02	7095-98-0101	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS
01/12/02	7097-18-0098	Staten Island PS #44	NS	Air	NS	NS	NS	NS	NS	NS

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-12-02pm.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 15, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	36	09:00:00	10	00:15:00	100	0.0	0.0	28.8	267.6
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/16/02

File Name	NYC782	NYC783	NYC784	NYC785	NYC787	NYC786
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07353	A07354	A07356	A07355
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Iscpropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: B. Hoffman

U.S. EPA: Norrell

Date: 1/16/02

RST Site Project Manager: Brennan

Location	N	R	L			
DataRAM ID No.	2647	2607	2646			
Flow Rate (Liters / Minute)	2	2	2			
Start Time	0754	0804	0810			
Stop Time	1419	1412	1416			
Run Time (Minutes)	384	367	366			
Minimum Concentration (ug/m3)	0.0	0.0	0.0			
Maximum Concentration (ug/m3)	117.3	121.5	96.6			
Average Concentration (TWA) (ug/m3)	6.9	10.1	8.9			

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Early

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/16/02 RST: B. Hoffman

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppm)
N	0755	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
M1	0805	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
L	0815	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
J	0820	ND	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
Q	0825	ND	ND	21.1	6	ND	ND	ND	ND	ND	ND	ND
F	0830	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
A	0835	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
C	0840	ND	ND	21.1	5	ND	ND	ND	ND	ND	ND	ND
B	0845	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
H	0900	ND	ND	21.1	7	ND	ND	ND	ND	ND	ND	ND
I	0905	ND	ND	21.1	6	ND	ND	ND	ND	ND	ND	ND
D	0910	ND	ND	21.1	8	ND	ND	ND	ND	ND	ND	ND
K	0925	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
T	0930	ND	ND	21.1	4	ND	ND	ND	ND	ND	ND	ND
U	0933	ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
V	0940	ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
S	1005	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
P	1015	ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
E	1020	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND

SEM-1

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Late

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/16/02 RST: B. Hoffman

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl ppm	HF ppm	$COCl_2$ ppb
L	1210	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	1215	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
M1	1220	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
J	1225	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
Q	1240	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
F	1245	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
A	1250	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
C	1255	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
B	1300	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
H	1316	ND	ND	21.1	9	ND	ND	ND	ND	ND	ND	ND
I	1321	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
D	1330	0.2	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
K	1335	ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
T	1340	ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
U	1343	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
V	1346	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
S	1354	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
P	1357	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
E	1400	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, January 18, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 1:00 p.m. on 1/18

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 38 samples taken in and around ground zero on January 14 and January 15. EPA also sampled for asbestos at two additional lower Manhattan locations on January 11 and January 12. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,854, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 13. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 16 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 17 at Location L (northeast side of Stuyvesant High School), Location N (south side of Pier 25) and Location R (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 17 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the

levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 17 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of benzene, and levels of other VOCs did not exceed OSHA standards.

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds on January 17. Nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, January 18, 2002

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 14, 0815 - 2230)

All 19 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume recorded.

Fresh Kills (Jan 15, 0749 - 2206)

All 19 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume recorded.

Fresh Kills (Jan 16) - Particulate Monitoring (Dataram)

Nothing of significance reported at one station (P-2) based on daily average concentrations.
Limited monitoring due to equipment malfunctions.

Ambient Air Sampling Locations

NYC / ER (Jan 13) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 17) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
Instruments operated approximately 6½ hours.
Station L values ranged from 0.3 to 377.0 ug/m^3 with an average of 42.7 ug/m^3.
Station N values ranged from 0.0 to 95.7 ug/m^3 with an average of 37.5 ug/m^3.
a. Station R values ranged from 0.3 to 234.1 ug/m^3 with an average of 39.0 ug/m^3.

NYC / ER (Jan 15) - Volatile Organics (Mobile Laboratory)

Errata: Previously reported on the cover page of the January 16 Sampling Situation Report that the Volatile Organics (Mobile Laboratory) presented on that day were from January 12. The results posted in that report were actually from January 15.

NYC / ER (Jan 17) - Volatile Organics (Mobile Laboratory)

Benzene was not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.
A limited number of VOCs were detected above the detection limit (20 ppbv) in only the North and South Tower ground level samples.

Direct Reading Instruments

NYC / ER (Jan 17)

Nothing of significance reported.

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/14/02 0815 to 2230

Data Validation Date: 01/16/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/14/02	LF02171	P-1	720	Air	<7.0	<0.004	0	0	<7.87	<0.0042
01/14/02	LF02172	P-2	422	Air	<7.0	<0.006	0	0	<8.75	<0.0080
01/14/02	LF02173	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02174	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02175	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02176	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02177	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02178	P-8	210	Air	<7.0	<0.013	0	0	<8.75	<0.0160
01/14/02	LF02179	W-11	720	Air	26.75	0.014	0	0	<8.75	<0.0047
01/14/02	LF02180	W-12A	720	Air	11.46	0.006	1***	0	8.75	0.0047
01/14/02	LF02181	W-12B	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
01/14/02	LF02182	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02183	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02184	T-15	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/14/02	LF02185	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02186	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02187	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02188	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/14/02	LF02189	MPHS-20	703	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/14/02	LF02190	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/14/02	LF02191	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
NA(3) - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-14-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/15/02 0749 to 2206

Data Validation Date: 01/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/15/02	LF02192	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02193	P-2	500	Air	<7.0	<0.005	0	0	<7.87	<0.0061
01/15/02	LF02194	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02195	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02196	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02197	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02198	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02199	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02200	W-11	155****	Air	26.75	0.066	0	0	<8.75	<0.0217
01/15/02	LF02201	W-12A	720	Air	10.19	0.005	2***	0	17.50	0.0094
01/15/02	LF02202	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02203	B-13	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/15/02	LF02204	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02205	T-15	720	Air	45.86	0.025	0	0	<8.75	<0.0047
01/15/02	LF02206	T-16	720	Air	11.46	0.006	0	0	<8.75	<0.0047
01/15/02	LF02207	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02208	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02209	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02210	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/15/02	LF02211	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/15/02	LF02212	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (filters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
NA(3) - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-15-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/13/02 1200 to 2400

Data Validation Date: 01/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/13/02	7093-18-0108	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/13/02	7093-19-0108	Chambers Street	1344	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/13/02	7093-15-0106	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/13/02	7094-09-0096	Bronx PS #154	1398	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/13/02	7096-12-0102	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/13/02	7095-98-0102	Brooklyn PS #274	1090***	Air	<7.0	<0.002	0	0	<13.33	<0.0047
01/13/02	7097-18-0099	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

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Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 16, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	42	10:30:00	10	00:15:00	100	0.0	0.0	6.5	120.7
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/17/02

File Name	NYC790	NYC791	NYC792	NYC793	NYC795	NYC794
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07357	A07358	A07360	A07359
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	56	RL
Acetone	RL	RL	RL	RL	91	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	96
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	23	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	22
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: W. R. Tilener

U.S. EPA: Norrell

Date: 1-17-02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2646	2647	2607			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0758	0802	0809			
Stop Time	1432	1437	1434			
Run Time (Minutes)	394	395	385			
Minimum Concentration (ug/m3)	.3	.3	.0			
Maximum Concentration (ug/m3)	234.1	377.	95.7			
Average Concentration (TWA) (ug/m3)	39.0	42.7	37.5			

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/17/02 A.M. RST: J.R. Tichenor

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	0803	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	0813	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M1	0818	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
J	0824	ND	ND	22.8	ND	ND	ND	ND	ND	ND	ND	ND
Q	0829	ND	ND	20.7	2	ND	ND	ND	ND	ND	ND	ND
F	0834	ND	ND	20.6	4	ND	ND	ND	ND	ND	ND	ND
A	0843	ND	ND	20.6	ND	ND	ND	ND	ND	ND	ND	ND
C	0848	ND	ND	20.6	1	ND	ND	ND	ND	ND	ND	ND
B	0853	ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	ND
D	0940	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
K	0947	ND	ND	20.5	ND	ND	ND	ND	ND	ND	ND	ND
T	0958	ND	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND
U	1009	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
V	1012	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
S	1023	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
P	1025	ND	ND	20.8	ND	ND	ND	ND	ND	ND	ND	ND
E	1031	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND

JRT

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1/17/02 RST: B. Hoffman

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	1227	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
M1	1230	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
N	1235	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
J	1239	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
Q	1242	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
F	1247	ND	ND	20.9	4	ND	ND	ND	ND	ND	ND	ND
A	1256	ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
C	1259	ND	ND	20.9	3	ND	ND	ND	ND	ND	ND	ND
B	1304	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
D	1316	ND	ND	20.9	2	ND	ND	ND	ND	ND	ND	ND
K	1336	ND	ND	20.9	3	ND	ND	ND	ND	ND	ND	ND
T	1338	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
U	1342	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
V	1345	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
S	1351	ND	ND	20.9	1	ND	ND	ND	ND	ND	ND	ND
P	1359	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND
E	1403	ND	ND	20.9	ND	ND	ND	ND	ND	ND	ND	ND

B. Hoffman

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday-Monday, January 19-21, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 10:30 a.m. on 1/22

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 86 samples taken in and around ground zero on January 14 through January 16. EPA also sampled for asbestos at two additional lower Manhattan locations on January 14 through January 16. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,946, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) from January 14 through January 16. None showed exceedances of the AHERA re-entry standard. (A sample was not collected from P.S. 274 on January 14 due to an equipment malfunction.)

Staten Island Landfill:
Air (Asbestos) - Fifty-six air samples collected from January 16 through January 18 were analyzed for asbestos. All samples were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 17 and January 20 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from January 11 through January 18 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard

(NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM10 - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from January 11 through January 18 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Particulate Monitoring - EPA used portable monitors to collect samples on January 18 at Location N (south side of Pier 25) and Location R (northwest side of Stuyvesant High School), and on January 20 at Location L (northeast side of Stuyvesant High School) and Locations N & R. All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 18 through Janueary 20 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 18 through January 20 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of benzene, and levels of other VOCs did not exceed OSHA standards. (The January 19 South Tower sample was not analyzed due to an equipment malfunction.)

Direct Air Readings - EPA did air monitoring in and around ground zero for a number of compounds from January 18 through January 20. Several readings noted during the morning monitoring period of January 19 were above the carbon monoxide NAAQS (8-hour average) of 9 ppm. Otherwise, nothing of significance was noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, January 21, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 14, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location S) was not collected due to an equipment malfunction.
Note: Location T will no longer be sampled on weekend days due to the unavailability of access.

NYC / ER (Jan 15, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 15, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location F) was not collected due to an equipment malfunction.

NYC / ER (Jan 16, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 16, 0748 - 2300)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-6) was not collected due to an equipment malfunction.

Fresh Kills (Jan 17, 0740 - 2225)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Jan 18, 0740 - 2205)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Jan 17) - Particulate Monitoring (Dataram)

Nothing of significance reported at one station (P-2) based on daily average concentrations.

Fresh Kills (Jan 18) - Particulate Monitoring (Dataram)

No particulate measurements were conducted due to an equipment malfunction.

Fresh Kills (Jan 19) - Particulate Monitoring (Dataram)

No particulate measurements were conducted due to the weather conditions.

Fresh Kills (Jan 20) - Particulate Monitoring (Dataram)

Nothing of significance reported at one station (P-2) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Jan 14 - 16) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 20 samples were collected from these monitoring sites. A sample was not collected from Site 7 on January 14 due to an equipment malfunction.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 11) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***14.41 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***15.25 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***14.51 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 11) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***22.38 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 12) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.13 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.34 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***8.56 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 12) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***13.11 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 13) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***8.50 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***8.45 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***7.13 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 13) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***10.84 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 14) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.63 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.83 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***13.44 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 14) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***26.12 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 15) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***19.68 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***19.61 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***24.19 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 15) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***37.81 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 16) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***10.90 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***9.38 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.69 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 16) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***20.16 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 17) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***13.56 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***14.04 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***15.74 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 17) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***28.67 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 18) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***12.07 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.75 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***13.75 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 18) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***25.73 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 18) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations N and R) were below the OSHA TWA.
Instruments operated approximately 5½ hours.
Measurements were not conducted at Station L due to an equipment malfunction.
Station N values ranged from 0.0 to 83.2 ug/m³ with an average of 25.0 ug/m³.
Station R values ranged from 0.0 to 129.4 ug/m³ with an average of 30.5 ug/m³.

NYC / ER (Jan 19) - Particulate Monitoring (Dataram)

No particulate measurements were conducted at Stations L, N, and R due to the weather conditions.

NYC / ER (Jan 20) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 0.4 to 63.1 ug/m³ with an average of 24.5 ug/m³.
Station N values ranged from 0.0 to 118.9 ug/m³ with an average of 17.5 ug/m³.
Station R values ranged from 9.4 to 244.7 ug/m³ with an average of 30.3 ug/m³.

NYC / ER (Jan 18) - Volatile Organics (Mobile Laboratory)

Aside from one compound detected at one location, volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC / ER (Jan 19) - Volatile Organics (Mobile Laboratory)

Benzene was not detected above the detection limit (20 ppbv) in any of the three samples collected (Washing Tent, Austin Tobin Plaza, and North Tower), including in the debris area at ground level.
Limited number of VOCs detected above the detection limit (20 ppbv); all in the North Tower ground level sample.
The South Tower sample was not analyzed because it was lost due to a tear in the Tedlar bag.

NYC / ER (Jan 20) - Volatile Organics (Mobile Laboratory)

Aside from two compounds detected above the detection limit (20 ppbv) at two of the locations (North and South Tower ground level), volatile organic compounds were not detected at any of the four locations above the detection limit (20 ppbv).

Direct Reading Instruments

NYC / ER (Jan 18)

Low levels of carbon monoxide noted at nearly all stations during the afternoon monitoring period.
Otherwise, nothing of significance reported.

NYC / ER (Jan 19)

Several readings noted during the morning monitoring period above the carbon monoxide NAAQS (8-hour average) of 9 ppm.
Low levels of carbon monoxide noted at nearly all stations during the afternoon monitoring period.

NYC / ER (Jan 20)

Nothing of significance reported.
Real-time air monitoring will no longer be conducted after January 21.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/14/02 1200 to 2359

Data Validation Date: 01/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/14/02	RST-03234	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03235	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03236	N	587	Air	<7.0	<0.005	0	0	<8.00	<0.0052
01/14/02	RST-03237	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03238	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03239	F	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/14/02	RST-03240	A-Duplicate	720	Air	10.83	0.006	0	0	<8.89	<0.0048
01/14/02	RST-03241	A	390	Air	12.74	0.013	0	0	<8.00	<0.0079
01/14/02	RST-03242	C	623	Air	7.64	0.005	0	0	<8.00	<0.0049
01/14/02	RST-03243	C-Duplicate	720	Air	8.28	0.004	0	0	<8.89	<0.0048
01/14/02	RST-03244	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03245	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03246	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03247	D	674	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/14/02	RST-03248	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03249	T	715	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03250	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	RST-03251	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/14/02	-	S	NS	Air	NS	NS	NS	NS	NS	NS
01/14/02	RST-03252	P	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/14/02	RST-03253	E	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/14/02	RST-03254	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	FB011502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/15/02	TB011502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-14-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/15/02 0001 to 1200

Data Validation Date: 01/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/15/02	RST-03255	L	489	Air	<7.0	<0.006	0	0	<8.00	<0.0063
01/15/02	RST-03256	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03257	N	637	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/15/02	RST-03258	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03259	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03260	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03261	A	711	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03262	C	720	Air	11.46	0.006	0	0	<8.89	<0.0048
01/15/02	RST-03263	B	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/15/02	RST-03264	B-Duplicate	380	Air	<7.0	<0.007	0	0	<8.00	<0.0081
01/15/02	RST-03265	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03266	I	570	Air	12.10	0.008	0	0	<8.00	<0.0054
01/15/02	RST-03267	D	720	Air	16.56	0.009	0	0	<8.89	<0.0048
01/15/02	RST-03268	D-Duplicate	596	Air	12.74	0.008	0	0	<8.00	<0.0052
01/15/02	RST-03269	K	577	Air	<7.0	<0.005	0	0	<8.00	<0.0053
01/15/02	RST-03270	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03271	U	704	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/15/02	RST-03272	V	683	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/15/02	RST-03273	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03274	P	400	Air	<7.0	<0.007	0	0	<8.00	<0.0077
01/15/02	RST-03275	E	401	Air	<7.0	<0.007	0	0	<8.00	<0.0077
01/15/02	RST-03276	W	706	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	FB011502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/15/02	TB011502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
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E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
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Key:
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-15-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/16/02 0748 to 2300

Data Validation Date: 01/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/16/02	LF02213	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02214	P-2	491	Air	<7.0	<0.0055	0	0	<7.87	<0.0062
01/16/02	LF02215	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02216	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02217	P-5	714	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02218	P-6	NS	Air	NS	NS	NS	NS	NS	NS
01/16/02	LF02219	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02220	P-8	578	Air	<7.0	<0.005	0	0	<8.75	<0.0058
01/16/02	LF02221	W-11	720	Air	15.29	0.008	1***	1***	17.50	0.0094
01/16/02	LF02222	W-12A	720	Air	11.46	0.006	0	0	<8.75	<0.0047
01/16/02	LF02223	W-12B	720	Air	13.38	0.007	0	0	<8.75	<0.0047
01/16/02	LF02224	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02225	B-14	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
01/16/02	LF02226	T-15	720	Air	26.75	0.014	0	0	<8.75	<0.0047
01/16/02	LF02227	T-16	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/16/02	LF02228	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02229	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02230	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/16/02	LF02231	MPHS-20	698	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/16/02	LF02232	Lot Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)
01/16/02	LF02233	Trip Blank	0	Air	<7.0	n/a	0	0	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-16-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/14/02 1200 to 2400

Data Validation Date: 01/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/14/02	7093-18-0109	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/14/02	7093-19-0109	Chambers Street	1264	Air	<7.0	<0.002	0	0	<16.00	<0.0049
01/14/02	7093-15-0107	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/14/02	7094-09-0097	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/14/02	7096-12-0103	Queens PS #199	988***	Air	<7.0	<0.003	0	0	<11.43	<0.0045
01/14/02	7095-98-0103	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS
01/14/02	7097-18-0100	Staten Island PS #44	1198***	Air	<7.0	<0.002	0	0	<13.33	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-14-02pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/15/02 1200 to 2359

Data Validation Date: 01/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/15/02	RST-03277	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03278	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03279	M-1 Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03280	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03281	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03282	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03283	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	-	F	NS	Air	NS	NS	NS	NS	NS	NS
01/15/02	RST-03284	A	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/15/02	RST-03285	C	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/15/02	RST-03286	B	663	Air	7.64	0.004	0	0	<8.00	<0.0046
01/15/02	RST-03287	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03288	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03289	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03290	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03291	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03292	U	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/15/02	RST-03293	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03294	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03295	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03296	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/15/02	RST-03297	W	720	Air	12.74	0.007	0	0	<8.89	<0.0048
01/16/02	FB011602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/16/02	TB011602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-15-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/16/02 0001 to 1200

Data Validation Date: 01/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/16/02	RST-03298	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03299	M-1	688	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/16/02	RST-03300	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03301	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03302	J	720	Air	<7.0	<0.004	0	2***	17.78	0.0095
01/16/02	RST-03303	J-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03304	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03305	F	355	Air	<7.0	<0.008	0	0	<8.00	<0.0087
01/16/02	RST-03306	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03307	C	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/16/02	RST-03308	B	720	Air	<7.0	<0.004	6***	0	53.33	0.0285
01/16/02	RST-03309	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03310	I	530	Air	<7.0	<0.005	0	0	<8.00	<0.0058
01/16/02	RST-03311	D	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/16/02	RST-03312	K	418	Air	<7.0	<0.006	0	0	<8.00	<0.0074
01/16/02	RST-03313	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03314	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03315	V	700	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/16/02	RST-03316	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03317	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03318	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03319	W	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/16/02	FB011602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/16/02	TB011602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
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U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-16-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/17/02 0740 to 2225

Data Validation Date: 01/20/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/17/02	LF02234	P-1	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/17/02	LF02235	P-2	476	Air	<7.0	<0.006	0	0	<8.75	<0.0071
01/17/02	LF02236	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02237	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02238	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02239	P-6	580	Air	<7.0	<0.005	0	0	<7.87	<0.0052
01/17/02	LF02240	P-7	694	Air	<7.0	<0.004	0	0	<7.87	<0.0044
01/17/02	LF02241	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02242	W-11	720	Air	19.11	0.010	2***	0	17.50	0.0094
01/17/02	LF02243	W-12A	720	Air	9.55	0.005	3***	0	26.25	0.0140
01/17/02	LF02244	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02245	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02246	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02247	T-15	720	Air	12.74	0.007	0	0	<8.75	<0.0047
01/17/02	LF02248	T-16	720	Air	10.19	0.005	0	0	<8.75	<0.0047
01/17/02	LF02249	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02250	O-18	704	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/17/02	LF02251	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/17/02	LF02252	MPHS-20	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/17/02	LF02253	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/17/02	LF02254	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-17-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/18/02 0740 to 2205

Data Validation Date: 01/20/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/18/02	LF02255	P-1	693	Air	<7.0	<0.004	0	0	<7.87	<0.0044
01/18/02	LF02256	P-2	436	Air	<7.0	<0.006	0	0	<5.62	<0.0050
01/18/02	LF02257	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02258	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02259	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02260	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02261	P-7	712	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02262	P-8	702	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/18/02	LF02263	W-11	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02264	W-12A	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02265	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02266	B-13	718	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02267	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02268	T-15	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02269	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02270	O-17	654	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/18/02	LF02271	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02272	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/18/02	LF02273	MPHS-20	697	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/18/02	LF02274	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/18/02	LF02275	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-18-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/15/02 1200 to 2400

Data Validation Date: 01/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/15/02	7093-18-0110	Park Row	1440	Air	11.46	0.003	0	0	<16.00	<0.0043
01/15/02	7093-19-0110	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/15/02	7093-15-0108	Manhattan PS #143	1356	Air	<7.0	<0.002	0	0	<16.00	<0.0045
01/15/02	7094-09-0098	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/15/02	7096-12-0104	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/15/02	7095-98-0104	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/15/02	7097-18-0101	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-15-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/16/02 1200 to 2400

Data Validation Date: 01/20/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/16/02	7093-18-0111	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/16/02	7093-19-0111	Chambers Street	1344	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/16/02	7093-15-0109	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/16/02	7094-09-0099	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/16/02	7096-12-0105	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/16/02	7095-98-0105	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/16/02	7097-18-0102	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-16-02pm.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 17, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	23	05:45:00	10	00:15:00	100	0.0	11.9	24.3	163.1
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 20, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	2295	1	26	06:30:00	10	00:15:00	100	0.0	0.0	11.3	86.9
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/20/02

File Name	NYC813	NYC814	NYC815	NYC816	NYC818	NYC817
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07369	A07370	A07372	A07371
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**120**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**47**
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexene	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/19/02

File Name	NYC806	NYC807	NYC808	NYC809	NYC810	
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower Plume	South Tower Plume
Sample Number			A07365	A07366	A07368	A07367
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	
Reporting Limit (RL)	20	20	20	20	20	
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**37**	NR [1]
Chlorodifluoromethane	RL	RL	RL	RL	RL	
Dichlorodifluoromethane	RL	RL	RL	RL	**100**	
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	
Chloromethane	RL	RL	RL	RL	RL	
Vinyl Chloride	RL	RL	RL	RL	RL	
1,3-Butadiene	RL	RL	RL	RL	RL	
Bromomethane	RL	RL	RL	RL	RL	
Chloroethane	RL	RL	RL	RL	RL	
Trichlorofluoromethane	RL	RL	RL	RL	**57**	
Isopropyl Alcohol	RL	RL	RL	RL	**120**	
Acetone	RL	RL	RL	RL	**95**	
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	
1,1-Dichloroethene	RL	RL	RL	RL	RL	
3-Chloropropene	RL	RL	RL	RL	RL	
Methylene Chloride	RL	RL	RL	RL	RL	
MTBE	RL	RL	RL	RL	RL	
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	
Hexane	RL	RL	RL	RL	RL	
1,1-Dichloroethane	RL	RL	RL	RL	RL	
Vinyl Acetate	RL	RL	RL	RL	RL	
2-Butanone	RL	RL	RL	RL	RL	
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	
Ethyl Acetate	RL	RL	RL	RL	RL	
Chloroform	RL	RL	RL	RL	RL	
Tetrahydrofuran	RL	RL	RL	RL	RL	
1,1,1-Trichloroethane	RL	RL	RL	RL	**31**	
Cyclohexane	RL	RL	RL	RL	**45**	
Carbon Tetrachloride	RL	RL	RL	RL	RL	
1,2-Dichloroethane	RL	RL	RL	RL	RL	
Benzene	RL	RL	RL	RL	RL	
Heptane	RL	RL	RL	RL	RL	
Trichloroethene	RL	RL	RL	RL	**120**	
1,2-Dichloropropane	RL	RL	RL	RL	RL	
1,4-Dioxane	RL	RL	RL	RL	RL	
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	
Toluene	RL	RL	RL	RL	RL	
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	
2-Hexanone	RL	RL	RL	RL	RL	
Tetrachloroethene	RL	RL	RL	RL	RL	
Dibromochloromethane	RL	RL	RL	RL	RL	
1,2-Dibromoethane	RL	RL	RL	RL	RL	
Chlorobenzene	RL	RL	RL	RL	RL	
Ethylbenzene	RL	RL	RL	RL	RL	
m&p-Xylenes	RL	RL	RL	RL	RL	
0-Xylene	RL	RL	RL	RL	RL	
Styrene	RL	RL	RL	RL	RL	
Bromoform	RL	RL	RL	RL	RL	
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	
4-Ethyltoluene	RL	RL	RL	RL	RL	
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	
Benzyl Chloride	RL	RL	RL	RL	RL	
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/18/02

File Name	NYC798	NYC799	NYC800	NYC801	NYC803	NYC802
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07361	A07362	A07364	A07363
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	50
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: J.R. Tichenor

U.S. EPA: Norrell

Date: 1-20-02

RST Site Project Manager: Brennan

Location	R	L	N			
DataRAM ID No.	2607	2646	2647			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0820	0824	0840			
Stop Time	1429	1438	1440			
Run Time (Minutes)	369	373	359			
Minimum Concentration (ug/m3)	9.4	0.4	0.0			
Maximum Concentration (ug/m3)	244.7	63.1	118.9			
Average Concentration (TWA) (ug/m3)	38.3	24.5	17.5			

Page 1 of 1

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: BRENNAN

U.S. EPA: Norrell

Date: 1-18-02

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2607	2647	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0814	~~0818~~ 0818	0834			
Stop Time	1355	1356	1359			
Run Time (Minutes)	340.5		324.5			
Minimum Concentration (ug/m3)	0.0		0.0			
Maximum Concentration (ug/m3)	129.4		83.2			
Average Concentration (TWA) (ug/m3)	30.5 ~~0.0~~ JSL		25.0			

Data logged but would not download to computer, therefore data could not be recorded.

No ODS

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

1 of 2

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-20-02 A.M.

RST: R. Tilson

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	0825	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M1	0832	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
N	0839	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
J	0848	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
Q	0855	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
F	0902	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
A	0912	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
C	0916	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
B	0920	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
H	0930	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
I	0935	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
D	0955	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
K	1000	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
U	1005	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
V	1040	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
S	1005	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
P	1007	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
E	1013	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND

Reviewed by [illegible]

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

2 of 2

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-20-02 P.M. RST: JR Tickner

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl	HF	$COCl_2$
L	1224	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M1	1226	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
N	1230	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
J	1237	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
Q	1240	0.2	ND	21.3	1	ND	ND	ND	ND	ND	ND	ND
F	1245	0.4 ~~ND~~	ND	21.3	1	ND	ND	ND	ND	ND	ND	ND
A	1252	ND	ND	21.3	2	ND	ND	ND	ND	ND	ND	ND
C	1258	1.1	ND	21.3	10	ND	ND	ND	ND	ND	ND	ND
B	1303	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
H	1311	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
I	1315	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
D	1319	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
K	1324	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
U	1359	~~ND~~ 0.6	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
V	1400	0.2	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
S	1328	ND	ND	21.4	ND	ND	ND	ND	ND	ND	ND	ND
P	1329	ND	ND	21.3	3	ND	ND	ND	ND	ND	ND	ND
E	1334	ND	ND	21.3	2	ND	ND	ND	ND	ND	ND	ND

JRT

Uni... States Environmental Protection A... ...y
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-19-02 (EARLY) RST: BRENNAN

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppm)
L	0810	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
M	0815	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
N	0820	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
J	0825	ND	ND	21.2	10	ND	ND	ND	ND	ND	ND	ND
O	0840	ND	ND	21.2	9	ND	ND	ND	ND	ND	ND	ND
F	0845	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
A	0850	ND	ND	21.2	11	ND	ND	ND	ND	ND	ND	ND
C	0900	ND	ND	21.2	17	ND	ND	ND	ND	ND	ND	ND
B	0905	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
H	0915	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
I	0920	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
D	0930	ND	ND	21.2	6	ND	ND	ND	ND	ND	ND	ND
K	0940	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
P	0950	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
S	0955	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
E	1005	ND	ND	21.2	7	ND	ND	ND	ND	ND	ND	ND
U	1030	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
V	1035	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND

HCl, HF, $COCl_2$ - SPM

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-18-02 Cont

RST: Brennan

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppm)
L	1210	ND	ND	21.4	ND	ND	ND	ND	ND	ND	ND	ND
M	1215	ND	ND	21.4	2	ND	ND	ND	ND	ND	ND	ND
N	1220	ND	ND	21.4	ND	ND	ND	ND	ND	ND	ND	ND
J	1225	ND	ND	21.3	3	ND	ND	ND	ND	ND	ND	ND
O	1230	ND	ND	21.3	2	ND	ND	ND	ND	ND	ND	ND
F	1235	ND	ND	21.3	1	ND	ND	ND	ND	ND	ND	ND
A	1240	ND	ND	21.3	3	ND	ND	ND	ND	ND	ND	ND
C	1245	ND	ND	21.3	5	ND	ND	ND	ND	ND	ND	ND
B	1248	ND	ND	21.3	4	ND	ND	ND	ND	ND	ND	ND
H	1300	ND	ND	21.3	2	ND	ND	ND	ND	ND	ND	ND
I	1305	ND	ND	21.3	3	ND	ND	ND	ND	ND	ND	ND
D	1310	ND	ND	21.3	2	ND	ND	ND	ND	ND	ND	ND
K	1315	ND	ND	21.3	2	ND	ND	ND	ND	ND	ND	ND
T	1320	ND	ND	21.3	4	ND	ND	ND	ND	ND	ND	ND
U	1322	ND	ND	21.3	2	ND	ND	ND	ND	ND	ND	ND
V	1324	ND	ND	21.3	1	ND	ND	ND	ND	ND	ND	ND
S	1330	ND	ND	21.3	3	ND	ND	ND	ND	ND	ND	ND
P	1332	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
E	1334	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND

HF, HCl, COCl2 - [illegible]

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-15-02 A.M. RST: J.R. Tolson

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (PPM)	HF (PPM)	$POCl_3$ (PPB)
L	0835	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
M1	0837	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
N	0836	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
J	0840	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
Q	0845	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
F	0850	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
A	0855	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
C	0905	ND	ND	21.3	2	ND	ND	ND	ND	ND	ND	ND
B	0910	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
H	0920	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
E	0930	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
D	0940	ND	ND	21.1	2	ND	ND	ND	ND	ND	ND	ND
K	0945	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
U	0953	ND	ND	21.3	5	ND	ND	ND	ND	ND	ND	ND
V	1000	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
S	1005	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
P	1020	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
E	1025	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	ND
T	0850	ND	ND	21.3	1	ND	ND	ND	ND	ND	ND	ND

Page 1 of 2

HF, HCl, $COCl_2$ - SKM

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

DATE: 1-19-02 (LATE) RST: BRENNAN

Location	Time	PID (units)	LEL (%)	O_2 (%)	CO (ppm)	H_2S (ppm)	SO_2 (ppm)	Cl_2 (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	$COCl_2$ (ppb)
L	1220	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
M	1223	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
N	1226	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
J	1230	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
O	1234	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
F	1236	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
A	1241	ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
C	1245	ND	ND	21.2	5	ND	ND	ND	ND	ND	ND	ND
B	1247	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
H	1252	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
I	1252	ND	ND	21.2	3	ND	ND	ND	ND	ND	ND	ND
D	1310	ND	ND	21.2	7	ND	ND	ND	ND	ND	ND	ND
K	1315	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
S	1324	ND	ND	21.2	1	ND	ND	ND	ND	ND	ND	ND
P	1328	ND	ND	21.2	2	ND	ND	ND	ND	ND	ND	ND
E	1331	ND	ND	21.2	4	ND	ND	ND	ND	ND	ND	ND
U	1345	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND
V	1349	ND	ND	21.2	ND	ND	ND	ND	ND	ND	ND	ND

HCl, HF, $COCl_2$ - SPM

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, January 22, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:00 p.m. on 1/22

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 44 samples taken in and around ground zero on January 17 and January 18. EPA also sampled for asbestos at two additional lower Manhattan locations on January 17. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 4,992, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 17. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - Fourteen air samples collected on January19 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted on January 19 and January 20 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM10 - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was

conducted on January 19 and January 20 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Particulate Monitoring - EPA used portable monitors to collect samples on January 21 at Location N (south side of Pier 25) and Location L (northeast side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 21 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 21 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of benzene.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, January 22, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 16, 1200 - 2359 hrs)

Results pending.

NYC / ER (Jan 17, 0001 - 1200 hrs)

Results pending.

NYC / ER (Jan 17, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 18, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 19, 0743 - 2200)

All 14 samples analyzed were below the TEM AHERA standard.
4 samples (Locations W-11, W-12A, W-12B, and T-16) were not analyzed due to overloading of particulates.
1 sample (Location O-17) was not collected due to an equipment malfunction.

Ambient Air Sampling Locations

NYC / ER (Jan 17) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 19) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***10.26 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.86 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.33 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 19) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***18.89 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 20) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***14.07 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***14.27 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***13.42 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 20) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***19.54 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 21) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
Instruments operated just under 2 hours due to the weather conditions.
Measurements were not conducted at Station R.
Station L values ranged from 19.9 to 86.1 ug/m³ with an average of 51.7 ug/m³.
Station N values ranged from 26.8 to 180.9 ug/m³ with an average of 53.6 ug/m³.

NYC / ER (Jan 21) - Volatile Organics (Mobile Laboratory)

Benzene was not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), includin in the debris area at ground level.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/17/02 1200 to 2359

Data Validation Date: 01/21/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/17/02	RST-03363	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03364	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03365	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03366	M-1 Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03367	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03368	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03369	Q	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03370	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03371	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03372	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03373	B	464	Air	<7.0	<0.006	0	0	<8.00	<0.0066
01/17/02	RST-03374	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03375	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03376	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03377	K	38****	Air	<7.0	<0.071	0	0	<8.00	<0.0811
01/17/02	RST-03378	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03379	U	711	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03380	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03381	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03382	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03383	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03384	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	FB011802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/18/02	TB011802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-17-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/18/02 0001 to 1200

Data Validation Date: 01/21/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/18/02	RST-03385	L	711	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03386	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03387	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03388	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03389	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03390	J-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03391	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03392	F	706	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/18/02	RST-03393	A	577	Air	<7.0	<0.005	0	0	<8.00	<0.0053
01/18/02	RST-03394	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03395	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03396	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03397	I	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/18/02	RST-03398	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03399	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03400	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03401	U	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03402	V	558	Air	<7.0	<0.005	0	0	<8.00	<0.0055
01/18/02	RST-03403	S	571	Air	<7.0	<0.005	0	0	<8.00	<0.0054
01/18/02	RST-03404	P	666	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/18/02	RST-03405	E	572	Air	<7.0	<0.005	0	0	<8.00	<0.0054
01/18/02	RST-03406	W	720	Air	11.46	0.006	1***	0	8.89	0.0048
01/18/02	FB011802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/18/02	TB011802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
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Key:
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NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-18-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/19/02 0743 to 2200

Data Validation Date: 01/21/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/19/02	LF02276	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02277	P-2	464	Air	<7.0	<0.006	0	0	<7.87	<0.0065
01/19/02	LF02278	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02279	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02280	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02281	P-6	484	Air	<7.0	<0.006	0	1***	7.87	0.0063
01/19/02	LF02282	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02283	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02284	W-11	720	Air	25.48	0.014	NA (1)	NA (1)	NA (1)	NA (1)
01/19/02	LF02285	W-12A	720	Air	28.03	0.015	NA (1)	NA (1)	NA (1)	NA (1)
01/19/02	LF02286	W-12B	720	Air	10.19	0.005	NA (1)	NA (1)	NA (1)	NA (1)
01/19/02	LF02287	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02288	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02289	T-15	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02290	T-16	720	Air	<7.0	<0.004	NA (1)	NA (1)	NA (1)	NA (1)
01/19/02	LF02291	O-17	NS	Air	NS	NS	NS	NS	NS	NS
01/19/02	LF02292	O-18	710	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02293	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02294	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/19/02	LF02295	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/19/02	LF02296	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-19-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/17/02 1200 to 2400

Data Validation Date: 01/21/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/17/02	7093-18-0112	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/17/02	7093-19-0112	Chambers Street	1422	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/17/02	7093-15-0110	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/17/02	7094-09-0100	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/17/02	7096-12-0106	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/17/02	7095-98-0106	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/17/02	7097-18-0103	Staten Island PS #44	1440 [a]	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
[a] - volume not calculated on chain of custody form
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-17-02pm.xls

United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: [illegible] Tschener

U.S. EPA: Norrell

Date: 1-21-02

RST Site Project Manager: Brennan

Location	L	N				
DataRAM ID No.	2647	2646				
Flow Rate (Liters / Minute)	2.0	2.0				
Start Time	0814	0828				
Stop Time	1012	1014 ~~1014~~				
Run Time (Minutes)	118	106				
Minimum Concentration (ug/m3)	19.9	26.8				
Maximum Concentration (ug/m3)	86.1	120.9				
Average Concentration (TWA) (ug/m3)	51.7	53.6				

No ODS (sampling stalk) for 3rd data ram, did not set out @ Station R.

Stopped sampling @ ~10:15 due to Rain.

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/21/02

File Name	NYC821	NYC822	NYC823	NYC824	NYC826	NYC825
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07373	A07374	A07376	A07375
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**88**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	**25**
Dichlorodifluoromethane	RL	RL	RL	RL	**23**	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	**38**	RL
Isopropyl Alcohol	RL	RL	RL	RL	**28**	RL
Acetone	RL	RL	RL	RL	**720**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**100**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	**24**	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	**25**
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	**67**	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	**51**	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**45**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	**33**	RL
m&p-Xylenes	RL	RL	RL	RL	**38**	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	**62**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, January 23, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 11:30 p.m. on 1/23

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 125 samples taken in and around ground zero from January 16 through January 20. EPA also sampled for asbestos at two additional lower Manhattan locations on January 18. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,119, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 18. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - Eighteen air samples collected on January 20 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 22 at Location N (south side of Pier 25) and Location L (northeast side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 22 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL)

averaged over an 8-hour day.

All samples taken on January 22 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, January 23, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 16, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 17, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location C) was not collected due to an equipment malfunction.

NYC / ER (Jan 18, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.
Note: Low sample volume recorded.

NYC / ER (Jan 19, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.
Note: Low sample volume recorded.

NYC / ER (Jan 19, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

NYC / ER (Jan 20, 0001 - 1200 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
2 samples (Locations B and Q) were not collected due to an equipment malfunction.
1 location (Location T) was not sampled since access was not available.
Note: Low sample volume recorded.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 20, 0745 - 2234)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location T-16) was not collected due to an equipment malfunction.

Fresh Kills (Jan 21) - Particulate Monitoring (Dataram)

No particulate measurements were conducted due to the weather conditions.

Ambient Air Sampling Locations

NYC / ER (Jan 18) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 22) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Measurements were not conducted at Station R.
Station L values ranged from 0.0 to 108.2 ug/m^3 with an average of 19.1 ug/m^3.
Station N values ranged from 0.2 to 212.3 ug/m^3 with an average of 18.6 ug/m^3.

NYC / ER (Jan 22) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/16/02 1200 to 2359

Data Validation Date: 01/18/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/16/02	RST-03320	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03321	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03322	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03323	J	711	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03324	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03325	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03326	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03327	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03328	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03329	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03330	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03331	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03332	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03333	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03334	T-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03335	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03336	U-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03337	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03338	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03339	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03340	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/16/02	RST-03341	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	FB011702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/17/02	TB011702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-16-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/17/02 0001 to 1200

Data Validation Date: 01/18/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/17/02	RST-03342	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03343	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03344	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03345	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03346	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03347	F	716	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03348	A	704	Air	<7.0	<0.004	1***	1***	17.78	0.0097
01/17/02	-	C	NS	Air	NS	NS	NS	NS	NS	NS
01/17/02	RST-03349	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03350	H	708	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/17/02	RST-03351	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03352	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03353	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03354	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03355	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03356	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03357	V-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03358	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03359	S-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	RST-03360	P	680	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/17/02	RST-03361	E	702	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/17/02	RST-03362	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/17/02	FB011702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/17/02	TB011702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-17-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/18/02 1200 to 2359

Data Validation Date: 01/21/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/18/02	RST-03407	L	2****	Air	<7.0	<1.349	0	0	<8.00	<1.5400
01/18/02	RST-03408	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03409	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03410	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03411	Q	498	Air	<7.0	<0.005	0	0	<8.00	<0.0062
01/18/02	RST-03412	F	691	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/18/02	RST-03413	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03414	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03415	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03416	I	639	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/18/02	RST-03417	H	596	Air	<7.0	<0.005	0	0	<8.00	<0.0052
01/18/02	RST-03418	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03419	D-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03420	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03421	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03422	S	679	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/18/02	RST-03423	S-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03424	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03425	U	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	-	T	NS	Air	NS	NS	NS	NS	NS	NS
01/18/02	RST-03426	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/18/02	RST-03427	W	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/19/02	FB011902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/19/02	TB011902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
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W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
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NS - Sample not submitted due to no access to station location

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-18-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/19/02 0001 to 1200

Data Validation Date: 01/21/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/19/02	RST-03428	L	709	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03429	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03430	N	720	Air	<7.0	<0.004	2***	0	17.78	0.0095
01/19/02	RST-03431	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03432	Q	367	Air	<7.0	<0.007	0	0	<8.00	<0.0084
01/19/02	RST-03433	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03434	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03435	C	720	Air	7.01	0.004	2***	0	17.78	0.0095
01/19/02	RST-03436	B	609	Air	<7.0	<0.004	0	0	<8.89	<0.0056
01/19/02	RST-03437	H	281	Air	<7.0	<0.010	0	0	<8.00	<0.0110
01/19/02	RST-03438	I	665	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/19/02	RST-03439	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03440	K	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/19/02	RST-03441	K-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03442	S	683	Air	<7.0	<0.004	1***	0	8.00	0.0045
01/19/02	RST-03443	P	697	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/19/02	RST-03444	P-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03445	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03446	U	608	Air	<7.0	<0.004	0	0	<8.00	<0.0051
01/19/02	RST-03447	V	679	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/19/02	RST-03448	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	FB011902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/19/02	TB011902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
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Key:
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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-19-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/19/02 1200 to 2359

Data Validation Date: 01/22/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/19/02	RST-03449	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03450	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03451	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03452	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03453	Q	464	Air	<7.0	<0.006	1***	0	8.00	0.0066
01/19/02	RST-03454	F	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/19/02	RST-03455	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03456	C	702	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/19/02	RST-03457	C-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03458	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03459	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03460	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03461	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03462	K	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/19/02	RST-03463	S	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/19/02	RST-03464	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03465	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03466	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03467	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03468	V-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/19/02	RST-03469	W	720	Air	12.10	0.006	0	0	<8.89	<0.0048
01/20/02	FB012002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/20/02	TB012002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Key:
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-19-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/20/02 0001 to 1200

Data Validation Date: 01/22/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/20/02	RST-03470	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03471	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03472	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03473	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	-	Q	NS	Air	NS	NS	NS	NS	NS	NS
01/20/02	RST-03474	F	660	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/20/02	RST-03475	A	685	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/20/02	RST-03476	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	-	B	NS	Air	NS	NS	NS	NS	NS	NS
01/20/02	RST-03477	B-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03478	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03479	I	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/20/02	RST-03480	D	270	Air	<7.0	<0.010	0	0	<8.00	<0.0114
01/20/02	RST-03481	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03482	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03483	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03484	E	567	Air	<7.0	<0.005	0	0	<8.00	<0.0054
01/20/02	RST-03485	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03486	U-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03487	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03488	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	FB012002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/20/02	TB012002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Key:
* Sample volume (filters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-20-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/20/02 0745 to 2234

Data Validation Date: 01/22/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/20/02	LF02297	P-1	592	Air	<7.0	<0.005	0	0	<7.87	<0.0051
01/20/02	LF02298	P-2	437	Air	<7.0	<0.006	0	0	<7.87	<0.0069
01/20/02	LF02299	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02300	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02301	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02302	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02303	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02304	P-8	626	Air	<7.0	<0.004	0	0	<7.87	<0.0048
01/20/02	LF02305	W-11	720	Air	34.39	0.018	1***	0	8.75	0.0047
01/20/02	LF02306	W-12A	720	Air	34.39	0.018	0	0	<8.75	<0.0047
01/20/02	LF02307	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02308	B-13	702	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/20/02	LF02309	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02310	T-15	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/20/02	LF02311	T-16	NS	Air	NS	NS	NS	NS	NS	NS
01/20/02	LF02312	O-17	685	Air	<7.0	<0.004	0	0	<8.75	<0.0049
01/20/02	LF02313	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02314	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02315	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/20/02	LF02316	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/20/02	LF02317	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
NA(3) - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-20-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/18/02 1200 to 2400

Data Validation Date: 01/21/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc*
01/18/02	7093-18-0113	Park Row	1184***	Air	<7.0	<0.002	0	0	<13.33	<0.0043
01/18/02	7093-19-0113	Chambers Street	1276	Air	<7.0	<0.002	0	0	<16.00	<0.0048
01/18/02	7093-15-0111	Manhattan IS #143	1336	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/18/02	7094-09-0101	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/18/02	7096-12-0107	Queens PS #199	1148***	Air	<7.0	<0.002	0	0	<13.33	<0.0045
01/18/02	7095-98-0107	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/18/02	7097-18-0104	Staten Island PS #44	1324	Air	<7.0	<0.002	0	0	<16.00	<0.0047

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: January 22, 2002

Location	**L**	**N**	
DataRAM I.D. No.	2647	2646	
Flow Rate (liters/minute)	2.0	2.0	
Start Time	0812	0824	
Stop Time	1423	1425	
Run Time (minutes)	370.5	361	
Minimum Concentration (ug/m^3)	0.0	0.2	
Maximum Concentration (ug/m^3)	108.2	212.3	
Average Concentration (ug/m^3)	19.1	18.6	

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/22/02

File Name	NYC830	NYC831	NYC832	NYC833	NYC835	NYC834
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07377	A07378	A07380	A07379
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, January 24, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 3:15 p.m. on 1/24

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 40 samples taken in and around ground zero on January 20 and January 21. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,159, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Staten Island Landfill:
Air (Asbestos) - Nineteen air samples collected on January 21 were analyzed for asbestos. All samples were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on January 22 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 23 at Location L (northeast side of Stuyvesant High School), Location N (south side of Pier 25) and Location R (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Dioxin - A total of 13 samples were collected during the period of December 14 to January 7 at several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 23 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the

levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 23 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, January 24, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 20, 1200 - 2359 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
2 samples (Locations A and N) were not collected due to an equipment malfunction.
1 location (Location T) was not sampled since access was not available.
Note: Low sample volume recorded.

NYC / ER (Jan 21, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 21, 0750 - Jan 22, 0030)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Jan 22) - Particulate Monitoring (Dataram)

Nothing of significance reported at one station (P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Dec 14 - Jan 7) - Dioxin (EPA-ORD)

Twelve (12) 72-hour samples were collected during this period at Park Row (4 samples), Chambers St./West St. (7 samples), and Albany St. (1 sample) at roof top locations.
One (1) 16-hour sample was collected (due to equipment problems) during this period at Park Row at a roof top location.
None of the samples collected were above the EPA Removal Action guidelines (based on a 30-year exposure).
Note: The analytical results for 10 of the 13 samples indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.
Data is not attached.

NYC / ER (Jan 23) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 7.3 to 108.3 ug/m^3 with an average of 22.6 ug/m^3.
Station N values ranged from 4.6 to 93.9 ug/m^3 with an average of 14.6 ug/m^3.
Station R values ranged from 5.0 to 99.8 ug/m^3 with an average of 12.9 ug/m^3.

NYC / ER (Jan 23) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/20/02 1200 to 2359

Data Validation Date: 01/23/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/20/02	RST-03489	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03490	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03491	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03492	M-1 Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	-	N	NS	Air	NS	NS	NS	NS	NS	NS
01/20/02	RST-03493	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03494	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03495	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	-	A	NS	Air	NS	NS	NS	NS	NS	NS
01/20/02	RST-03496	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03497	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03498	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03499	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03500	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03501	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03502	U	700	Air	<7.0	<0.004	1***	0	8.89	0.0049
01/20/02	RST-03503	V	180****	Air	<7.0	<0.015	0	0	<8.00	<0.0171
01/20/02	RST-03504	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03505	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03506	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/20/02	RST-03507	W	663	Air	12.74	0.007	0	0	<8.00	<0.0046
01/21/02	FB012102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/21/02	TB012102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-20-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/21/02 0001 to 1200

Data Validation Date: 01/23/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/21/02	RST-03508	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03509	M-1	645	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/21/02	RST-03510	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03511	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03512	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03513	J-Duplicate	680	Air	<7.0	<0.004	1***	0	8.00	0.0045
01/21/02	RST-03514	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03515	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03516	A	678	Air	11.46	0.0065	0	0	<8.00	<0.0045
01/21/02	RST-03517	C	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/21/02	RST-03518	B	614	Air	<7.0	<0.004	0	0	<8.00	<0.0050
01/21/02	RST-03519	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03520	I	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/21/02	RST-03521	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03522	K	696	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/21/02	RST-03523	U	651	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/21/02	RST-03524	V	581	Air	<7.0	<0.005	0	0	<8.00	<0.0053
01/21/02	RST-03525	S	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/21/02	RST-03526	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03527	E	686	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/21/02	RST-03528	W	720	Air	7.64	0.004	1***	0	8.89	0.0048
01/21/02	FB012102	Field Blank	0	Air	<7.0	n/a	NA(3)	NA(2)	NA(2)	NA(2)
01/21/02	TB012102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
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E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
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Q: Barclay & West St. (center island) in proximity to USCG command post
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Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
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**** Extremely low sample volume collected

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Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-21-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/21/02 0750 to 01/22/02 0030

Data Validation Date: 01/23/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/21/02	LF02318	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02319	P-2	474	Air	<7.0	<0.006	0	0	<8.75	<0.0071
01/21/02	LF02320	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02321	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02322	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02323	P-6	536	Air	<7.0	<0.005	0	0	<8.75	<0.0063
01/21/02	LF02324	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02325	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02326	W-11	720	Air	15.29	0.008	1***	0	8.75	0.0047
01/21/02	LF02327	W-12A	720	Air	30.57	0.016	2***	0	17.50	0.0094
01/21/02	LF02328	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02329	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02330	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02331	T-15	720	Air	19.11	0.010	1***	0	8.75	0.0047
01/21/02	LF02332	T-16	720	Air	34.39	0.018	0	0	<8.75	<0.0047
01/21/02	LF02333	O-17	437	Air	<7.0	<0.006	0	0	<7.87	<0.0069
01/21/02	LF02334	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02335	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02336	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/21/02	LF02337	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/21/02	LF02338	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
January 22, 2002

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
2	-74.198262	40.566883	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
3	-74.198685	40.570054	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2295	1	34	08:30:00	10	00:15:00	0	0.0	2.1	10.3	156.5

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: January 23, 2002

Location	L	N	R
DataRAM I.D. No.	2607	2646	2647
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0804	0818	0804
Stop Time	1406	1412	1406
Run Time (minutes)	362	354	362
Minimum Concentration (ug/m^3)	7.3	4.6	5.0
Maximum Concentration (ug/m^3)	108.3	93.9	99.8
Average Concentration (ug/m^3)	22.6	14.6	12.9

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/23/02

File Name	NYC838	NYC839	NYC840	NYC841	NYC843	NYC842
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07381	A07382	A07384	A07383
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, January 25, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:00 p.m. on 1/25

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 85 samples taken in and around ground zero from January 21 through January 23. EPA also sampled for asbestos at two additional lower Manhattan locations from January 19 through January 21. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,250, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:
Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) from January 19 through January 21. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:
Air (Asbestos) - Thirty-four air samples collected on January 22 and January 23 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Dioxin - A total of 19 samples were collected on January 3 and January 8 at several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Polyaromatic Hydrocarbons (PAH's) - A total of 20 samples were collected on December 27 and January 3 at several locations in Lower Manhattan. PAH's were not detected.

PCB's - A total of 10 samples were collected on January 8 at several locations in Lower Manhattan. PCB's were not detected.

Silicates - A total of 20 samples were collected on January 8 and January 10 at several locations in Lower Manhattan. Silicates were not detected.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 24 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 24 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, January 25, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 21, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location Q) was not collected due to an equipment malfunction.

NYC / ER (Jan 22, 0001 - 1200 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
2 samples (Locations C and E-duplicate) were not collected due to an equipment malfunction.

NYC / ER (Jan 22, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 23, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 22, 0748 - 2220)

All 16 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-2) was not collected due to an equipment malfunction.
2 samples (Locations T-15 and T-16) were not analyzed due to overloading of particulates.

Fresh Kills (Jan 23, 0740 - 2220)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location O-17) was not collected due to an equipment malfunction.

Fresh Kills (Jan 23) - Particulate Monitoring (Dataram)

No particulate measurements were conducted due to the weather conditions.

Ambient Air Sampling Locations

NYC / ER (Dec 14 - Jan 7) - Dioxin (EPA-ORD)

Errata: Previously reported there was one (1) 16-hour sample collected at Park Row. The sample was actually a 72-hour sample. Therefore in total, there were thirteen (13) 72-hour samples collected during this period at Park Row (5 samples), Chambers St./West St. (7 samples), and Albany St. (1 sample) at roof top locations. None of the analytical results are impacted by this correction.

NYC / ER (Jan 3) - Dioxin

All 9 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
1 sample (Location R) was not collected due to sampling equipment damage.
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 8) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Dec 27) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Jan 3) - PAHs

All 10 samples analyzed did not detect any PAHs

NYC / ER (Jan 8) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Jan 8) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Jan 10) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Jan 19 -21) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 20 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 23) - Particulate Monitoring (Dataram)

No particulate measurements were conducted at Stations L, N, and R due to the weather conditions.

NYC / ER (Jan 24) - Volatile Organics (Mobile Laboratory)

Benzene was not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.
A limited number (3) of VOCs were detected above the detection limit (20 ppbv) in only the North Tower ground level samples.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/21/02 1200 to 2359

Data Validation Date: 01/24/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/21/02	RST-03529	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03530	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03531	N	706	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03532	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	-	Q	NS	Air	NS	NS	NS	NS	NS	NS
01/21/02	RST-03533	F	720	Air	8.28	0.004	0	0	<8.89	<0.0048
01/21/02	RST-03534	A	720	Air	9.55	0.005	0	0	<8.89	<0.0048
01/21/02	RST-03535	C	720	Air	14.01	0.007	0	0	<8.89	<0.0048
01/21/02	RST-03536	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03537	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03538	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03539	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03540	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03541	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03542	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03543	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03544	P-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03545	E	573	Air	<7.0	<0.005	0	0	<8.00	<0.0054
01/21/02	RST-03546	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03547	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03548	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/21/02	RST-03549	W	720	Air	10.19	0.005	2***	0	17.78	0.0095
01/21/02	FB012102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/21/02	TB012102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-21-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/22/02 0001 to 1200

Data Validation Date: 01/24/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/22/02	RST-03550	L	613	Air	<7.0	<0.004	0	0	<8.00	<0.0050
01/22/02	RST-03551	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03552	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03553	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03554	Q	638	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/22/02	RST-03555	F	720	Air	7.64	0.004	2***	0	17.78	0.0095
01/22/02	RST-03556	A	719	Air	12.74	0.007	1***	0	8.89	0.0048
01/22/02	-	C	NS	Air	NS	NS	NS	NS	NS	NS
01/22/02	RST-03557	B	686	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/22/02	RST-03558	H	680	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/22/02	RST-03559	I	644	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/22/02	RST-03560	I-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03561	D	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/22/02	RST-03562	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03563	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03564	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03565	E	702	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/22/02	-	E-Duplicate	NS	Air	NS	NS	NS	NS	NS	NS
01/22/02	RST-03566	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03567	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03568	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03569	W	720	Air	<7.0	<0.004	2***	0	17.78	0.0095
01/22/02	FB012202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/22/02	TB012202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-22-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/22/02 0748 to 2220

Data Validation Date: 01/24/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/22/02	LF02339	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02340	P-2	NS	Air	NS	NS	NS	NS	NS	NS
01/22/02	LF02341	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02342	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02343	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02344	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02345	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02346	P-8	708	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/22/02	LF02347	W-11	720	Air	26.75	0.014	1****	1****	17.50	0.0094
01/22/02	LF02348	W-12A	720	Air	19.11	0.010	2***	0	17.50	0.0094
01/22/02	LF02349	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02350	B-13	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/22/02	LF02351	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02352	T-15	720	Air	99.36	0.053	NA(1)	NA(1)	NA(1)	NA(1)
01/22/02	LF02353	T-16	720	Air	19.11	0.010	NA(1)	NA(1)	NA(1)	NA(1)
01/22/02	LF02354	O-17	691	Air	<7.0	<0.004	0	0	<8.75	<0.0049
01/22/02	LF02355	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02356	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02357	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/22/02	LF02358	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/22/02	LF02359	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Amosite

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
NA(3) - Not analyzed for PCM or TEM due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-22-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/19/02 1200 to 2400

Data Validation Date: 01/24/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc*
01/19/02	7093-18-0114	Park Row	1176***	Air	<7.0	<0.002	0	0	<13.33	<0.0044
01/19/02	7093-19-0114	Chambers Street	1238	Air	<7.0	<0.002	0	0	<13.33	<0.0041
01/19/02	7093-15-0112	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/19/02	7094-09-0102	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/19/02	7096-12-0108	Queens PS #199	1416	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/19/02	7095-98-0108	Brooklyn PS #274	990***	Air	<7.0	<0.003	0	0	<11.43	<0.0044
01/19/02	7097-18-0105	Staten Island PS #44	1334	Air	<7.0	<0.002	0	0	<16.00	<0.0046

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-19-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/20/02 1200 to 2400

Data Validation Date: 01/24/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/20/02	7093-18-0115	Park Row	1352	Air	11.46	0.003	0	0	<16.00	<0.0046
01/20/02	7093-19-0115	Chambers Street	1266	Air	<7.0	<0.002	0	0	<16.00	<0.0049
01/20/02	7093-15-	Manhattan PS #143	NS	Air	NS	NS	NS	NS	NS	NS
01/20/02	7094-09-0103	Bronx PS #154	1342	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/20/02	7096-12-0109	Queens PS #199	1192***	Air	<7.0	<0.002	0	0	<13.33	<0.0043
01/20/02	7095-98-0109	Brooklyn PS #274	1376	Air	<7.0	<0.002	0	0	<16.00	<0.0045
01/20/02	7097-18-0106	Staten Island PS #44	1098***	Air	<7.0	<0.002	0	0	<13.33	<0.0047

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted due to no access to station location
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-20-02pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/22/02 1200 to 2359

Data Validation Date: 01/25/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/22/02	RST-03570	L	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/22/02	RST-03571	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03572	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03573	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03574	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03575	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03576	A	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/22/02	RST-03577	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03578	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03579	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03580	I	698	Air	<7.0	<0.004	0	0	<8.00	<0.0044
01/22/02	RST-03581	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03582	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03583	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03584	S-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03585	P	683	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/22/02	RST-03586	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03587	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03588	T-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03589	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03590	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/22/02	RST-03591	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	FB012302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/23/02	TB012302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-22-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/23/02 0001 to 1200

Data Validation Date: 01/25/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/23/02	RST-03592	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03593	M-1	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/23/02	RST-03594	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03595	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03596	Q	646	Air	<7.0	<0.004	1***	0	8.00	0.0048
01/23/02	RST-03597	F	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03598	A	454	Air	<7.0	<0.006	0	0	<8.00	<0.0068
01/23/02	RST-03599	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03600	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03601	H	392	Air	<7.0	<0.007	0	0	<8.00	<0.0079
01/23/02	RST-03602	I	666	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/23/02	RST-03603	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03604	K	299	Air	<7.0	<0.009	0	0	<8.00	<0.0103
01/23/02	RST-03605	S	675	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/23/02	RST-03606	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03607	E	720	Air	<7.0	<0.004	2***	1***	26.67	0.0143
01/23/02	RST-03608	T	720	Air	<7.0	<0.004	2***	0	16.00	0.0086
01/23/02	RST-03609	U	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/23/02	RST-03610	U-Duplicate	662	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/23/02	RST-03611	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03612	V-Duplicate	694	Air	<7.0	<0.004	0	0	<8.00	<0.0044
01/23/02	RST-03613	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	FB012302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/23/02	TB012302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-23-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/23/02 0740 to 2200

Data Validation Date: 01/25/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/23/02	LF02360	P-1	720	Air	<7.0	<0.004	3***	1***	35.00	0.0187
01/23/02	LF02361	P-2	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02362	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02363	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02364	P-5	573	Air	<7.0	<0.005	0	0	<8.75	<0.0059
01/23/02	LF02365	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02366	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02367	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02368	W-11	720	Air	38.22	0.020	2***	1****	26.25	0.0140
01/23/02	LF02369	W-12A	720	Air	11.46	0.006	0	0	<8.75	<0.0047
01/23/02	LF02370	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02371	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02372	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02373	T-15	720	Air	68.79	0.037	1***	0	8.75	0.0047
01/23/02	LF02374	T-16	720	Air	19.11	0.010	0	0	<8.75	<0.0047
01/23/02	LF02375	O-17	NS	Air	NS	NS	NS	NS	NS	NS
01/23/02	LF02376	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02377	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02378	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/23/02	LF02379	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/23/02	LF02380	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-23-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/21/02 1200 to 2400 and 01/20/02 1200 to 2130 [a]

Data Validation Date: 01/25/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/21/02	7093-18-0116	Park Row	1296	Air	8.92	0.003	0	0	<16.00	<0.0048
01/21/02	7093-19-0116	Chambers Street	1270	Air	<7.0	<0.002	0	0	<16.00	<0.0049
01/20/02	7093-15-0113	[a] Manhattan IS #143	1140***	Air	<7.0	<0.002	0	0	<13.33	<0.0045
01/21/02	7094-09-0104	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/21/02	7096-12-0110	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/21/02	7095-98-0110	Brooklyn PS #274	1090***	Air	<7.0	<0.002	0	0	<13.33	<0.0047
01/21/02	7097-18-0107	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
[a] The sampling date is 1/20/02 for sample 7093-15-0113 due to previous lack of access
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Table 1.1 Results of the Analysis for PAH in Air
WA # 0-0236: NYC ER Site

Date Sampled 12/27/01

Sample No.	05866		11471		11472		11473		11474	
Sampling Location	Lot Blank		TAGA		TAGA		A Barclay & West Broadway		Loc 3B Church & Vesey	
Volume (L)	0		480		131		480		480	
Compound Name	Conc. µg	MDL µg	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv	Conc. ppbv	MDL ppbv
Naphthalene	U	11	U	4.3	U	16	U	4.3	U	4.3
2-Methylnaphthalene	U	11	U	4.1	U	15	U	4.1	U	4.1
1-Methylnaphthalene	U	11	U	4.0	U	14	U	4.0	U	4.0
Biphenyl	U	11	U	3.8	U	14	U	3.8	U	3.8
2,6-Dimethylnaphthalene	U	12	U	3.8	U	14	U	3.8	U	3.8
Acenaphthylene	U	12	U	3.9	U	14	U	3.9	U	3.9
Acenaphthene	U	11	U	3.6	U	13	U	3.6	U	3.6
Dibenzofuran	U	11	U	3.4	U	13	U	3.4	U	3.4
Fluorene	U	11	U	3.5	U	13	U	3.5	U	3.5
Phenanthrene	U	11	U	3.1	U	12	U	3.1	U	3.1
Anthracene	U	11	U	3.2	U	12	U	3.2	U	3.2
Carbazole	U	12	U	3.7	U	13	U	3.7	U	3.7
Fluoranthene	U	12	U	2.9	U	11	U	2.9	U	2.9
Pyrene	U	11	U	2.8	U	10	U	2.8	U	2.8
Benzo(a)anthracene	U	11	U	2.5	U	9.2	U	2.5	U	2.5
Chrysene	U	10	U	2.2	U	8.2	U	2.2	U	2.2
Benzo(b)fluoranthene	U	11	U	2.3	U	8.5	U	2.3	U	2.3
Benzo(k)fluoranthene	U	12	U	2.5	U	9.2	U	2.5	U	2.5
Benzo(e)pyrene	U	11	U	2.3	U	8.4	U	2.3	U	2.3
Benzo(a)pyrene	U	13	U	2.5	U	9.3	U	2.5	U	2.5
Indeno(1,2,3-cd)pyrene	U	14	U	2.6	U	9.7	U	2.6	U	2.6
Dibenzo(a,h)anthracene	U	14	U	2.6	U	9.6	U	2.6	U	2.6
Benzo(g,h,i)perylene	U	13	U	2.4	U	8.8	U	2.4	U	2.4

COC 04891
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

ERTC 1/23/02

12-27-01&1-3-02PAH.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 1/10/02 0800 to 1536

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
1/10/02	06138	A	1000	Air	<0.01	<0.02	<0.02
1/10/02	06139	3B	980	Air	<0.01	<0.02	<0.02
1/10/02	06140	B	1020	Air	<0.01	<0.02	<0.02
1/10/02	06141	B	980	Air	<0.01	<0.02	<0.02
1/10/02	06142	C	920	Air	<0.01	<0.02	<0.02
1/10/02	06143	D	1000	Air	<0.01	<0.02	<0.02
1/10/02	06144	P	980	Air	<0.01	<0.02	<0.02
1/10/02	06145	S	1000	Air	<0.01	<0.02	<0.02
1/10/02	06146	E	990	Air	<0.01	<0.02	<0.02
1/10/02	06137	TAGA	980	Air	<0.01	<0.02	<0.02

coc# 04392

Sampling Locations:

NS: Not sampled

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St

ERT 1/22/02

G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
Location 3B Church & Vesey

NIOSH 7500: Silica crystalline by XRD

FL-1-10-02silica.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/08/02

Sample No.	WG-7039-1P		06041		06042		06043		06044		06045		06046	
Sampling Location	Method Blank		R		R		A		3B		B		C	
Sample Volume (L)	0		7035		6015		5040		6380		7200		5925	
Analyte	Result ng	MDL ng	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3
209-DeCB	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of MoCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of DiCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of TrCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of TeCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of PeCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of HxCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of HpCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of OcCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Sum of NoCBs	U	10.0	U	1.42	U	1.66	U	1.98	U	1.57	U	1.39	U	1.69
Total	0		0		0		0		0		0		0	

COC# 04383

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 1/22/02

1-08-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/08/02

Sample No.	06047		06048		06049		06050		06081		06082	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	6465		6660		5010		6540		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of MoCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of DiCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of TrCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of TeCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of PeCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of HxCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of HpCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of OcCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Sum of NoCBs	U	1.55	U	1.50	U	2.00	U	1.53	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 04383

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/08/02

Sample No.	WG7039-1			06041			06042			06043			06044			06045			06046		
Sampling Location	Method Blank			R- TAGA			R-TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			7035			6015			5040			6380			7200			5925		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0028	U		0.0033	U		0.0040	U		0.0031	U		0.0028	U		0.0034
12378-PeCDD	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
123478-HxCDD	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
123678-HxCDD	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
123789-HxCDD	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
1234678-HpCDD	U	0.0074	0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
OCDD	0.0146 J		0.20	U		0.028	U		0.017	U		0.040	U	0.0031	0.031	U		0.028	U	0.0030	0.034
2378-TCDF	U		0.020	U		0.0028	U		0.0033	U		0.0040	U		0.0031	U		0.0028	U		0.0034
12378-PeCDF	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
23478-PeCDF	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
123478-HxCDF	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
123678-HxCDF	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U	0.0002	0.014	0.0002 J		0.017
234678-HxCDF	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
123789-HxCDF	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
1234678-HpCDF	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U	0.0004	0.014	U		0.017
1234789-HpCDF	U		0.10	U		0.014	U		0.017	U		0.020	U		0.016	U		0.014	U		0.017
OCDF	U		0.20	U		0.024	U		0.033	U		0.040	U		0.031	U		0.028	U		0.034
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	U			U			U			0.0020			0.0015			0.0012			0.0009		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			0.0002		
Total HpCDFs	U			U			U			U			U			U			0.0004		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0401			0.0007			0.0010			0.0011			0.0011			0.0007			0.0009		

COC# 04383
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/22/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

1-08-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/08/02

Sample No.	06047			06048			06049			06050			06081			06082		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	6465			6660			5010			6540			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0031	U		0.0030	U		0.0040	U		0.0031	U		0.020	U		0.020
12378-PeCDD	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
123478-HxCDD	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
123678-HxCDD	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
123789-HxCDD	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
1234678-HpCDD	U		0.015	U	0.0009	0.015	U		0.020	U	0.0008	0.015	0.0049 J		0.10	U	0.0044	0.10
OCDD	U		0.031	U		0.030	U	0.0028	0.040	U		0.031	U		0.20	0.0182 J		0.20
2378-TCDF	U		0.0031	U		0.0030	U		0.0040	U		0.0031	U		0.020	U		0.020
12378-PeCDF	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
23478-PeCDF	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
123478-HxCDF	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
123678-HxCDF	U		0.015	U		0.015	0.0003 J		0.020	0.0002 J		0.015	U		0.10	U		0.10
234678-HxCDF	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
123789-HxCDF	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
1234678-HpCDF	U		0.015	U		0.015	U		0.020	U	0.0002	0.015	U	0.0014	0.10	0.001B J		0.10
1234789-HpCDF	U		0.015	U		0.015	U		0.020	U		0.015	U		0.10	U		0.10
OCDF	U		0.031	U		0.030	U		0.040	U		0.031	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	0.0011			0.0004			0.0011			U			0.0049			0.0019		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			0.0003			0.0002			U			U		
Total HpCDFs	U			U			U			U			U			0.0018		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0009			0.0010			0.0015			0.0009			0.0399			0.0401		

COC# 04383

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 1/08/02 0820 to 1922

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
1/8/02	06073	A	1000	Air	<0.01	<0.02	<0.02
1/8/02	06074	3B	960	Air	<0.01	<0.02	<0.02
1/8/02	06075	B	1000	Air	<0.01	<0.02	<0.02
1/8/02	06076	C	1000	Air	<0.01	<0.02	<0.02
1/8/02	06077	D	1000	Air	<0.01	<0.02	<0.02
1/8/02	06070	E	1000	Air	<0.01	<0.02	<0.02
1/8/02	06078	P	1000	Air	<0.01	<0.02	<0.02
1/8/02	06079	S	1000	Air	<0.01	<0.02	<0.02
1/8/02	06071	TAGA	1000	Air	<0.01	<0.02	<0.02
1/8/02	06072	TAGA	1000	Air	<0.01	<0.02	<0.02

coc# 04382

NS: Not sampled

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
Location 3B Church & Vesey

ERT 1/17/02

NIOSH 7500: Silica crystalline by XRD

FL-1-08-02silica.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/03/02

Sample No.	WG7028-1			05991			05993			05994			05995			05996		
Sampling Location	Method Blank			R- TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			5280			5685			7200			5805			7200		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0038	U		0.0035	U		0.0028	U		0.0034	U	0.0001	0.0028
12378-PeCDD	U	0.0015	0.10	U		0.019	U		0.018	0.0001 J		0.014	U		0.017	U	0.0004	0.014
123478-HxCDD	U	0.0019	0.10	0.0002 J		0.019	U	0.0001	0.018	U	0.0002	0.014	U		0.017	U	0.0004	0.014
123678-HxCDD	U	0.0026	0.10	U	0.0002	0.019	U	0.0003	0.018	U	0.0002	0.014	U	0.0003	0.017	U	0.0004	0.014
123789-HxCDD	U	0.0022	0.10	U	0.0002	0.019	U		0.018	U	0.0001	0.014	U		0.017	0.0005 J		0.014
1234678-HpCDD	0.007J		0.10	U		0.019	U		0.018	U		0.014	U		0.017	U		0.014
OCDD	0.0362 J		0.20	U		0.038	U		0.035	U		0.028	U		0.034	U		0.028
2378-TCDF	U		0.020	U	0.0001	0.0038	0.0001 J		0.0035	0.0004 J		0.0028	0.0001 J		0.0034	U	0.0001	0.0028
12378-PeCDF	U		0.10	U		0.019	U		0.018	U		0.014	U	0.0001	0.017	0.0004 J		0.014
23478-PeCDF	U		0.10	U		0.019	U	0.0001	0.018	U	0.0002	0.014	U	0.0003	0.017	0.0004 J		0.014
123478-HxCDF	U	0.0015	0.10	U	0.0001	0.019	U	0.0001	0.018	U	0.0001	0.014	U		0.017	U		0.014
123678-HxCDF	U	0.0017	0.10	U	0.0001	0.019	U	0.0001	0.018	U	0.0002	0.014	0.0002 J		0.017	0.0004 J		0.014
234678-HxCDF	0.0017 J		0.10	U	0.0001	0.019	U	0.0001	0.018	U	0.0001	0.014	0.0002 J		0.017	0.0004J		0.014
123789-HxCDF	U	0.0012	0.10	U	0.0001	0.019	U	0.0001	0.018	0.0002 J		0.014	U	0.0001	0.017	U	0.0004	0.014
1234678-HpCDF	0.0026 J		0.10	U	0.0002	0.019	U	0.0002	0.018	U	0.0003	0.014	0.0005 J		0.017	0.0008 J		0.014
1234789-HpCDF	U	0.0018	0.10	U		0.019	U	0.0001	0.018	U		0.014	U		0.017	0.0004 J		0.014
OCDF	U	0.0054	0.20	U		0.038	U		0.035	0.0004 J		0.028	0.0002 J		0.034	0.0014 J		0.028
Total TCDDs	0.0004			U			0.0002			0.0007			0.0010			0.0009		
Total PeCDDs	U			U			U			0.0001			U			U		
Total HxCDDs	0.0014			0.0003			0.0003			0.0004			0.0005			0.0005		
Total HpCDDs	0.0070			0.0015			U			U			0.0011			0.0023		
Total TCDFs	U			U			0.0001			0.0014			0.0002			U		
Total PeCDFs	U			U			U			U			0.0001			0.0008		
Total HxCDFs	0.0022			0.0001			0.0001			0.0003			U			0.0008		
Total HpCDFs	0.0026			U			U			0.0002			0.0007			0.0012		
Total Adjusted Conc																		
TEQ (ND=0)	0.0003			0.0000			0.0000			0.0001			0.0000			0.0004		
TEQ (ND=1/2)	0.0379			0.0001			0.0002			0.0001			0.0002			0.0005		

COC# 04898
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/17/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/03/02

Sample No.	05997			05998			05999			06000			06031			06032		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	5565			6405			6630			7230			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U	0.0001	0.0036	U		0.0031	U		0.0030	U		0.0028	U	0.0005	0.020	U		0.020
12378-PeCDD	U		0.018	U		0.016	U		0.015	U		0.014	U	0.0006	0.10	U	0.0004	0.10
123478-HxCDD	U	0.0002	0.018	U		0.016	U		0.015	U		0.014	U		0.10	U		0.10
123678-HxCDD	0.0003 J		0.018	U		0.016	0.0002 J		0.015	U	0.0002	0.014	U	0.0021	0.10	U	0.0013	0.10
123789-HxCDD	U		0.018	U		0.016	U	0.0001	0.015	U	0.0002	0.014	U		0.10	U		0.10
1234678-HpCDD	U		0.018	U		0.016	U		0.015	U		0.014	0.0095 J		0.10	U	0.0076	0.10
OCDD	U		0.036	U		0.031	U		0.030	U		0.028	U		0.20	0.0297 J		0.20
2378-TCDF	U	0.0002	0.0036	U		0.0031	0.0001 J		0.0030	U		0.0028	U	0.0004	0.020	U	0.0005	0.020
12378-PeCDF	U		0.018	U		0.016	U		0.015	U		0.014	U	0.0004	0.10	U	0.0004	0.10
23478-PeCDF	U		0.018	U		0.016	U		0.015	U		0.014	0.0003 J		0.10	U		0.10
123478-HxCDF	U	0.0002	0.018	U	0.0001	0.016	U		0.015	U		0.014	0.0007 J		0.10	U		0.10
123678-HxCDF	U	0.0002	0.018	0.0001 J		0.016	U		0.015	U	0.0001	0.014	U	0.0007	0.10	U	0.0006	0.10
234678-HxCDF	U	0.0002	0.018	U		0.016	0.0001 J		0.015	0.0001 J		0.014	U		0.10	U		0.10
123789-HxCDF	U	0.0001	0.018	U	0.0001	0.016	U		0.015	0.0001 J		0.014		0.0004	0.10	U		0.10
1234678-HpCDF	U	0.0007	0.018	0.0004 J		0.016	U	0.0002	0.015	0.0002 J		0.014	U		0.10	U		0.10
1234789-HpCDF	U		0.018	U		0.016	U		0.015	U		0.014	U		0.10	U		0.10
OCDF	U	0.0007	0.036	0.0002 J		0.031	U	0.0002	0.030	U	0.0006	0.028	U	0.0025	0.20	U		0.20
Total TCDDs	0.0006			U			U			U			U			U		
Total PeCDDs	U			U			U			U			0.0004			U		
Total HxCDDs	0.0005			U			0.0002			U			0.0023			U		
Total HpCDDs	U			0.0010			U			0.0004			0.0180			U		
Total TCDFs	U			U			0.0001			U			U			U		
Total PeCDFs	U			U			U			U			0.0007			U		
Total HxCDFs	0.0004			0.0002			U			0.0003			U			U		
Total HpCDFs	U			0.0004			U			0.0002			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0003			0.0000		
TEQ (ND=1/2)	0.0002			0.0002			0.0002			0.0002			0.0400			0.0401		

COC# 04898

500

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/24/02

File Name	NYC847	NYC848	NYC849	NYC850	NYC852	NYC851
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07385	A07386	A07388	A07387
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	**80**	RL
Acetone	RL	RL	RL	RL	**530**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**26**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday-Monday, January 26-28, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:30 p.m. on 1/28

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 42 samples taken in and around ground zero on January 23 and January 24. EPA also sampled for asbestos at two additional lower Manhattan locations on January 22 and January 23. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,296, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 22 and January 23. None showed exceedances of the AHERA re-entry standard.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples from January 25 through January 27 at Location N (south side of Pier 25), Location R (northwest side of Stuyvesant High School) and Location L (northeast side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Isocyanates - A total of 24 samples were collected on December 11 and December 19 at numerous locations in Lower Manhattan. Isocyanates were either not detected or were below the OSHA PEL and NIOSH REL.

PCB's - A total of 10 samples were collected on January 10 at several locations in Lower

Manhattan. PCB's were not detected.

Metals - A total of 10 samples were collected on January 8 at several locations in Lower Manhattan. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted from January 25 through January 27 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from January 25 through January 27 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, January 28, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 23, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location E) was not collected due to an equipment malfunction.

NYC / ER (Jan 24, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
2 samples (Location I) was not collected due to an equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 24 - 27) - Particulate Monitoring (Dataram)

No particulate measurements were conducted during this period due to inoperative equipment.

Ambient Air Sampling Locations

NYC / ER (Dec 11) - Isocyanates

12 samples collected for confirmatory laboratory analysis of previously conducted field screening measurements.
Locations monitored: North Tower (northwest corner), West/Liberty Sts., and Locations A, B, C, D, E, P, R, S, 3B from the fixed ambient air sampling stations.
Sampling period consisted of a 15-minute grab at each location.
All 12 samples did not detect any isocyanates.
Field screening conducted previously at the two work-zone locations referenced above detected low levels of HDI and TDI (at or just above the instrument detection limits).

NYC / ER (Dec 19) - Isocyanates

12 samples collected for confirmatory laboratory analysis of previously conducted field screening measurements.
Locations monitored: North Tower, Vista Hotel, and Locations A, B, C, D, E, P, R, S, 3B from the fixed ambient air sampling stations.
Sampling period consisted of a 15-minute grab at each location.
Low levels of MDI monomer identified at Location R (0.0093 mg/m^3) and the Vista Hotel (0.014 mg/m^3) were below the OSHA PEL (0.2 mg/m^3) and NIOSH REL (0.05 mg/m^3) for these compounds.
Field screening conducted previously at the two work-zone locations referenced above detected low levels of MDI at the Vista Hotel location (at the instrument detection limit).

NYC / ER (Jan 8) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 10) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Jan 22 - 23) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 25) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 6 to 6½ hours.
Station L values ranged from 1.6 to 110.7 ug/m^3 with an average of 14.6 ug/m^3.
Station N values ranged from 2.2 to 63.9 ug/m^3 with an average of 9.0 ug/m^3.
Station R values ranged from 3.1 to 153.3 ug/m^3 with an average of 11.5 ug/m^3.

NYC / ER (Jan 26) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 3.6 to 167.9 ug/m^3 with an average of 16.8 ug/m^3.
Station N values ranged from 4.2 to 124.2 ug/m^3 with an average of 11.6 ug/m^3.
Station R values ranged from 4.8 to 53.7 ug/m^3 with an average of 12.8 ug/m^3.

NYC / ER (Jan 27) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 12.9 to 448.0 ug/m^3 with an average of 28.6 ug/m^3.
Station N values ranged from 9.2 to 248.3 ug/m^3 with an average of 21.3 ug/m^3.
Station R values ranged from 4.2 to 50.9 ug/m^3 with an average of 22.1 ug/m^3.

NYC / ER (Jan 25) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC / ER (Jan 26) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC / ER (Jan 27) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/23/02 1200 to 2359

Data Validation Date: 01/25/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/23/02	RST-03614	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03615	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03616	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03617	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03618	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03619	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03620	A	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/23/02	RST-03621	A-Duplicate	419	Air	<7.0	<0.006	0	0	<8.00	<0.0074
01/23/02	RST-03622	C	702	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/23/02	RST-03623	C-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03624	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03625	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03626	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03627	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03628	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03629	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03630	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	-	E	NS	Air	NS	NS	NS	NS	NS	NS
01/23/02	RST-03631	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03632	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03633	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/23/02	RST-03634	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	FB012402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/24/02	TB012402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-23-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/24/02 0001 to 1200

Data Validation Date: 01/25/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/24/02	RST-03635	L	675	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/24/02	RST-03636	M-1	689	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/24/02	RST-03637	N	660	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/24/02	RST-03638	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03639	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03640	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03641	A	656	Air	12.74	0.007	0	0	<8.00	<0.0047
01/24/02	RST-03642	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03643	B	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/24/02	RST-03644	B-Duplicate	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/24/02	RST-03645	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	-	I	NS	Air	NS	NS	NS	NS	NS	NS
01/24/02	RST-03646	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03647	D-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03648	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03649	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03650	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03651	E	690	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/24/02	RST-03652	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03653	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03654	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03655	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	FB012402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/24/02	TB012402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
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NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-24-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/22/02 1200 to 2400

Data Validation Date: 01/27/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/22/02	7093-18-0117	Park Row	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
01/22/02	7093-19-0117	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/22/02	7093-15-0114	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/22/02	7094-09-0105	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/22/02	7096-12-0111	Queens PS #199	1040***	Air	<7.0	<0.003	0	0	<13.33	<0.0049
01/22/02	7095-98-0111	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/22/02	7097-18-0108	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-22-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/23/02 1200 to 2400

Data Validation Date: 01/27/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc*
01/23/02	7093-18-0118	Park Row	1180***	Air	<7.0	<0.002	0	0	<13.33	<0.0044
01/23/02	7093-19-0118	Chambers Street	1210	Air	<7.0	<0.002	0	0	<13.33	<0.0042
01/23/02	7093-15-0116	Manhattan IS #143	1390	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/23/02	7094-09-0106	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/23/02	7096-12-0112	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/23/02	7095-98-0112	Brooklyn PS #274	1190***	Air	<7.0	<0.002	0	0	<13.33	<0.0043
01/23/02	7097-18-0109	Staten Island PS #44	1440	Air	<7.0	<0.002	1****	0	16.00	0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-01-23-02pm.xls

NYC Emergency Response
Air Samples - Isocyanate Results-Total of Front and Back
Sampling Date 12/11/01

Sample No.	Method Blank		05721				05722				05723				05724				05725				05726			
Sampling Location	Lab		R				R				A				3B				B				C			
Sample Volume (L)	0		15				15				15				15				15				15			
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³
MDI Monomer	U	0.040	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027
2,4-TDI Monomer	U	0.030	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
2,6-TDI Monomer	U	0.030	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
HDI Monomer	U	0.030	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
HMDI Monomer	U	0.040	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027
IPDI Monomer	U	0.15	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010

COC# 04374
Note: No MDI and HDI Oligomers were observed during the review of the chromatographs by the analyst.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 1/24/02

12-11-01Isocynanateair.xls

NYC Emergency Response
Air Samples - Isocyanate Results-Total of Front and Back
Sampling Date 12/11/01

Sample No.	05727				05728				05729				05730				05910				11370				05909	
Sampling Location	D				P				S				E				North Tower NW Corner				West Side & Liberty				Field Blank	
Sample Volume (L)	15				15				15				15				15				15				0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg
MDI Monomer	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040
2,4-TDI Monomer	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030
2,6-TDI Monomer	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030
HDI Monomer	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030
HMDI Monomer	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040
IPDI Monomer	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15

COC# 04374

Note: No MDI and HDI Oligomers were observed during the review of the chromatographs by the analyst.

NYC Emergency Response
Air Samples - Isocyanate Results-Total of Front and Back
Sampling Date 12/19/01

Sample No.	Method Blank		05971				05972				05973				05974				05975				05976			
Sampling Location	Lab		R				R				A				3B				B				C			
Sample Volume (L)	0		15				15				15				15				15				15			
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³
MDI Monomer	U	0.040	0.10	0.040	0.0067	0.0027	0.14	0.040	0.0093	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027
2,4-TDI Monomer	U	0.030	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
2,6-TDI Monomer	U	0.030	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
HDI Monomer	U	0.030	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
HMDI Monomer	U	0.040	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027
IPDI Monomer	U	0.15	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010

COC# 04375

Note: No MDI and HDI Oligomers were observed during the review of the chromatographs by the analyst.

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 1/24/02

12-19-01Isocynanateairrev.xls

NYC Emergency Response
Air Samples - Isocyanate Results-Total of Front and Back
Sampling Date 12/19/01

Sample No.	05977				05978				05979				05980			
Sampling Location	D				P				S				E			
Sample Volume (L)	15				15				15				15			
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3
MDI Monomer	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027
2,4-TDI Monomer	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
2,6-TDI Monomer	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
HDI Monomer	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020	U	0.030	U	0.0020
HMDI Monomer	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027	U	0.040	U	0.0027
IPDI Monomer	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010	U	0.15	U	0.010

Sample No.	05970				11501				05969	
Sampling Location	North Tower 1				Vista Hotel				Field Blank	
Sample Volume (L)	30				15				0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg
MDI Monomer	U	0.040	U	0.0013	0.21	0.040	0.014	0.0027	U	0.040
2,4-TDI Monomer	U	0.030	U	0.0010	U	0.030	U	0.0020	U	0.030
2,6-TDI Monomer	U	0.030	U	0.0010	U	0.030	U	0.0020	U	0.030
HDI Monomer	U	0.030	U	0.0010	U	0.030	U	0.0020	U	0.030
HMDI Monomer	U	0.040	U	0.0013	U	0.040	U	0.0027	U	0.040
IPDI Monomer	U	0.15	U	0.0050	U	0.15	U	0.010	U	0.15

COC# 94375
Note: No MDI and HDI Oligomers were observed during the review of the chromatographs by the analyst.

12-19-01Isocynanateairrev.xls

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		06083		06084		06051	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		TAGA	
Air Volume (L)		-		-		-		0		0		4819.5	
Date Collected		-		-		-		01/08/02		01/08/02		01/08/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.26
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Calcium	ICAP	3.4	2.5	3.3	2.5	3.8	2.5	U	2.5	U	2.5	0.79	0.52
Chromium	ICAP	0.45	0.13	0.71	0.13	0.75	0.13	0.36	0.13	0.24	0.13	U	0.026
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Iron	ICAP	2.8	0.63	U	0.63	U	0.63	U	0.63	U	0.63	U	0.13
Lead	AA-Fur	0.073	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.015	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	6.8	2.6
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

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Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06052		06053		06054		06055		06056		06057	
Location		TAGA		A-BARCLAY ST. & WEST BROADWAY		LOC 3B CHURCH & VESEY ST		B-CHURCH & DEY ST.		C -LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.	
Air Volume (L)		4462.5		4800		4250		3640		4950		3400	
Date Collected		01/08/02		01/08/02		01/08/02		01/08/02		01/08/02		01/08/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.28	3.6	0.26	0.37	0.29	0.80	0.34	0.48	0.25	0.42	0.37
Antimony	AA-Fur	U	0.011	0.011	0.01	U	0.012	U	0.014	U	0.01	U	0.015
Arsenic	AA-Fur	U	0.011	U	0.01	0.023	0.012	U	0.014	U	0.01	U	0.015
Barium	ICAP	U	0.028	0.048	0.026	U	0.029	U	0.034	U	0.025	U	0.037
Beryllium	ICAP	U	0.011	U	0.01	U	0.012	U	0.014	U	0.01	U	0.015
Cadmium	ICAP	U	0.028	U	0.026	U	0.029	U	0.034	U	0.025	U	0.037
Calcium	ICAP	0.87	0.56	26.0	0.52	3.4	0.59	7.8	0.69	3.6	0.51	3.7	0.74
Chromium	ICAP	U	0.028	0.062	0.026	U	0.029	U	0.034	0.085	0.025	0.062	0.037
Cobalt	ICAP	U	0.056	U	0.052	U	0.059	U	0.069	U	0.051	U	0.074
Copper	ICAP	U	0.056	0.15	0.052	0.064	0.059	U	0.069	U	0.051	U	0.074
Iron	ICAP	0.15	0.14	11	0.13	3.1	0.15	3.2	0.17	2.1	0.13	1.0	0.18
Lead	AA-Fur	0.018	0.011	0.087	0.01	0.047	0.012	0.044	0.014	0.022	0.01	0.028	0.015
Magnesium	ICAP	U	2.8	3.6	2.6	U	2.9	U	3.4	U	2.5	U	3.7
Manganese	ICAP	U	0.028	0.16	0.026	0.051	0.029	0.058	0.034	0.03	0.025	U	0.037
Nickel	ICAP	U	0.056	U	0.052	U	0.059	U	0.069	U	0.051	U	0.074
Potassium	ICAP	U	11	U	10	U	12	U	14	U	10	U	15
Selenium	AA-Fur	U	0.011	U	0.01	U	0.012	U	0.014	U	0.01	U	0.015
Silver	ICAP	U	0.028	U	0.026	U	0.029	U	0.034	U	0.025	U	0.037
Sodium	ICAP	7.2	2.8	5.5	2.6	4.7	2.9	16	3.4	6.6	2.5	6.8	3.7
Thallium	AA-Fur	U	0.011	U	0.01	U	0.012	U	0.014	U	0.01	U	0.015
Vanadium	ICAP	U	0.056	U	0.052	U	0.059	U	0.069	U	0.051	U	0.074
Zinc	ICAP	0.07	0.056	0.60	0.052	0.20	0.059	0.18	0.069	0.11	0.051	0.13	0.074

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

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Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06058		06059		06060	
Location		P-ALBANY ST. & SOUTHEND AVE		S-RECTOR PLACE & SOUTHEND AVE		E-LIBERTY ST. & SOUTHEND AVE	
Air Volume (L)		4090		4210		3410	
Date Collected		01/08/02		01/08/02		01/08/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.31	U	0.30	U	0.37
Antimony	AA-Fur	U	0.012	U	0.012	U	0.015
Arsenic	AA-Fur	U	0.012	U	0.012	U	0.015
Barium	ICAP	U	0.031	U	0.03	U	0.037
Beryllium	ICAP	U	0.012	U	0.012	U	0.015
Cadmium	ICAP	U	0.031	U	0.03	U	0.037
Calcium	ICAP	2.5	0.61	1.3	0.59	U	0.73
Chromium	ICAP	0.061	0.031	U	0.03	0.08	0.037
Cobalt	ICAP	U	0.061	U	0.059	U	0.073
Copper	ICAP	U	0.061	U	0.059	U	0.073
Iron	ICAP	0.80	0.15	0.62	0.15	U	0.18
Lead	AA-Fur	0.02	0.012	0.018	0.012	U	0.015
Magnesium	ICAP	U	3.1	U	3.0	U	3.7
Manganese	ICAP	U	0.031	U	0.03	U	0.037
Nickel	ICAP	U	0.061	U	0.059	U	0.073
Potassium	ICAP	U	12	U	12	U	15
Selenium	AA-Fur	U	0.012	U	0.012	U	0.015
Silver	ICAP	U	0.031	U	0.03	U	0.037
Sodium	ICAP	17	3.1	13	3.0	7.0	3.7
Thallium	AA-Fur	U	0.012	U	0.012	U	0.015
Vanadium	ICAP	U	0.061	U	0.059	U	0.073
Zinc	ICAP	U	0.061	0.075	0.059	U	0.073

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/10/02

Sample No.	WG-7044-1P		06101		06102		06103		06104		06105		06106	
Sampling Location	Method Blank		R		A		3B		B		B		C	
Sample Volume (L)	0		7455		8040		5250		6438		6615		6566	
Analyte	Result ng	MDL ng	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3
209-DeCB	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of MoCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of DiCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of TrCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of TeCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of PeCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of HxCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of HpCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of OcCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Sum of NoCBs	U	10.0	U	1.34	U	1.24	U	1.90	U	1.55	U	1.51	U	1.52
Total	0		0		0		0		0		0		0	

COC# 04389

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 1/23/02

1-10-02PCBairrev.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/10/02

Sample No.	06107		06108		06109		06110		06111		06112	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7005		6165		6002.25		6726		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of MoCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of DiCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of TrCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of TeCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of PeCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of HxCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of HpCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of OcCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Sum of NoCBs	U	1.43	U	1.62	U	1.67	U	1.49	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 04389

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: January 25, 2002

Location	L	N	R
DataRAM I.D. No.	2607	2646	2647
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0806	0823	0806
Stop Time	1432	1436	1433
Run Time (minutes)	385.5	372.5	386.5
Minimum Concentration (ug/m^3)	1.6	2.2	3.1
Maximum Concentration (ug/m^3)	110.7	63.9	153.3
Average Concentration (ug/m^3)	14.6	9.0	11.5

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: January 27, 2002

Location	L	N	R
DataRAM I.D. No.	2646	2647	2607
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0820	0833	0816
Stop Time	1437	1440	1433
Run Time (minutes)	376.5	366.5	376.5
Minimum Concentration (ug/m^3)	12.9	9.2	4.2
Maximum Concentration (ug/m^3)	448.0	248.3	50.9
Average Concentration (ug/m^3)	28.6	21.3	22.1

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: January 26, 2002

Location	L	N	R
DataRAM I.D. No.	2607	2647	2646
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0817	0831	0817
Stop Time	1437	1441	1437
Run Time (minutes)	380	370	380.5
Minimum Concentration (ug/m^3)	3.6	4.2	4.8
Maximum Concentration (ug/m^3)	167.9	124.2	53.7
Average Concentration (ug/m^3)	16.8	11.6	12.8

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/25/02

File Name	NYC857	NYC858	NYC859	NYC860	NYC862	NYC861
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07389	A07390	A07391	A07392
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/27/02

File Name	NYC874	NYC875	NYC876	NYC877	NYC879	NYC878
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07397	A07398	A07400	A07399
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, January 29, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:30 p.m. on 1/29

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 84 samples taken in and around ground zero from January 24 through January 26. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,380, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Staten Island Landfill:

Air (Asbestos) - Thirty-seven air samples collected on January 24 and January 25 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from January 21 through January 26 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM10 - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from January 21 through January 26 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Particulate Monitoring - EPA used portable monitors to collect samples on January 28 at Location N (south side of Pier 25), Location R (northwest side of Stuyvesant High School) and Location L (northeast side of Stuyvesant High School). All readings were below the OSHA

time-weighted permissible exposure limit for particulates.

Isocyanates - A total of 24 samples were collected on December 11 and December 19 at numerous locations in Lower Manhattan. The level of MDI (4,4'-Methylenediphenyl Isocyanate) identified at Location R (northwest side of Stuyvesant High School) on December 19 was above the EPA action guidance level. (Note that winds, at the time of this sampling event, were off the Hudson River.) Isocyanates in all other samples were either not detected or were below the OSHA PEL and NIOSH REL.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 28 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 28 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, January 29, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 24, 0001 - 1200 hrs)

Errata: Previously reported in the January 28 Sampling Situation Report that 2 samples were not collected due to equipment malfunctions. There was actually only one malfunction.

NYC / ER (Jan 24, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 25, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location N) was not collected due to an equipment malfunction.

NYC / ER (Jan 25, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

NYC / ER (Jan 26, 0001 - 1200 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
1 sample (Location D) was not collected due to an equipment malfunction.
1 location (Location T) was not sampled since access was not available.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 24, 0745 - 2220)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Jan 25, 0740 - 2230)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location O-17) was not collected due to an equipment malfunction.
Note: Low sample volume recorded.

Fresh Kills (Jan 28) - Particulate Monitoring (Dataram)

No particulate measurements were conducted due to inoperative equipment.

Ambient Air Sampling Locations

NYC / ER (Dec 19) - Isocyanates

Note: The January 28 Sampling Situation Report reported confirmatory isocyanate results. Additional information provided below to supplement original report.
The levels of MDI (4,4'-Methylenediphenyl Isocyanate) identified at Location R **(0.0093 mg/m^3)** and its duplicate sample **(0.0067 mg/m^3)** were both above the EPA Removal Action guidance level **(0.0062 mg/m^3)** based on noncarcinogenic effects.
As reported previously, MDI (4,4'-Methylenediphenyl Isocyanate) was also identified at the Vista Hotel location **(0.014 mg/m^3)**, within the Ground Zero work zone, where the OSHA PEL and NIOSH REL are more applicable.
The OSHA PEL for MDI is **0.2 mg/m^3**. The NIOSH REL is **0.05 mg/m^3**.
Winds were generally steady out of the west during the limited 15-minute time period the samples were collected.

NYC / ER (Jan 21) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***20.60 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***20.29 ug/m^3***.
Wall Street - 24-hour average concentrations for this period was ***19.61 ug/m^3***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Jan 21) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***26.28 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 22) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***14.82 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.11 ug/m^3***.
Wall Street - 24-hour average concentrations for this period was ***13.34 ug/m^3***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Jan 22) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***22.29 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 23) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***12.82 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.27 ug/m^3***.
Wall Street - 24-hour average concentrations for this period was ***12.47 ug/m^3***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Jan 23) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***21.25 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 24) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***14.33 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***16.32 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***14.94 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 24) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***19.82 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 25) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***9.80 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.59 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.52 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 25) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***21.34 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 26) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.16 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.75 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.06 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 26) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***19.07 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 28) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 0.0 to 184.1 ug/m³ with an average of 49.8 ug/m³.
Station N values ranged from 0.0 to 131.6 ug/m³ with an average of 37.3 ug/m³.
Station R values ranged from 0.0 to 140.3 ug/m³ with an average of 36.9 ug/m³.

NYC / ER (Jan 28) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/24/02 1200 to 2359

Data Validation Date: 01/27/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/24/02	RST-03656	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03657	M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03658	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03659	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03660	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03661	J-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03662	Q	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/24/02	RST-03663	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03664	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03665	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03666	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03667	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03668	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03669	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03670	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03671	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03672	U	487	Air	<7.0	<0.006	0	0	<8.00	<0.0063
01/24/02	RST-03673	V	405	Air	<7.0	<0.007	0	0	<8.00	<0.0076
01/24/02	RST-03674	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03675	P	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/24/02	RST-03676	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/24/02	RST-03677	W	720	Air	11.46	0.006	4***	0	35.56	0.0190
01/25/02	FB012502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/25/02	TB012502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. , (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-24-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/25/02 0001 to 1200

Data Validation Date: 01/27/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
01/25/02	RST-03678	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03679	L-Duplicate	717	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03680	M1	667	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/25/02	RST-03681	M1-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	-	N	NS	Air	NS	NS	NS	NS	NS	NS
01/25/02	RST-03682	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03683	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03684	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03685	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03686	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03687	C	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/25/02	RST-03688	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03689	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03690	D	705	Air	7.64	0.004	0	0	<8.89	<0.0049
01/25/02	RST-03691	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03692	T	705	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/25/02	RST-03693	U	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/25/02	RST-03694	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03695	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03696	P	695	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/25/02	RST-03697	E	713	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03698	W	720	Air	14.01	0.007	2***	0	17.78	0.0095
01/25/02	FB012502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/25/02	TB012502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
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C: Trinity (a.k.a. Church) & Liberty
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R: TAGA Bus Location
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U: Pier 6 Exit 2
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Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
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**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-25-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/25/02 1200 to 2359

Data Validation Date: 01/28/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/25/02	RST-03699	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03700	M1	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/25/02	RST-03701	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03702	J	720	Air	10.19	0.005	1***	0	8.89	0.0048
01/25/02	RST-03703	Q	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/25/02	RST-03704	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03705	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03706	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03707	C	695	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/25/02	RST-03708	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03709	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03710	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03711	I-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03712	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03713	K	720	Air	10.83	0.006	0	0	<8.89	<0.0048
01/25/02	RST-03714	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03715	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03716	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03717	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03718	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/25/02	RST-03719	W	720	Air	16.56	0.009	0	0	<8.89	<0.0048
01/26/02	FB012602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/26/02	TB012602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-25-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/26/02 0001 to 1200

Data Validation Date: 01/28/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/26/02	RST-03720	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03721	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03722	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03723	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03724	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03725	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03726	A	720	Air	8.28	0.004	0	0	<8.89	<0.0048
01/26/02	RST-03727	B	627	Air	<7.0	<0.004	0	0	<8.00	<0.0049
01/26/02	RST-03728	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03729	H	653	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/26/02	RST-03730	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	-	D	NS	Air	NS	NS	NS	NS	NS	NS
01/26/02	RST-03731	K	720	Air	7.01	0.004	1***	0	8.89	0.0048
01/26/02	RST-03732	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03733	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03734	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03735	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03736	P-Duplicate	569	Air	<7.0	<0.005	0	0	<8.00	<0.0054
01/26/02	RST-03737	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03738	E-Duplicate	546	Air	<7.0	<0.005	0	0	<8.00	<0.0056
01/26/02	RST-03739	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	FB012602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/26/02	TB012602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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B: SE corner of Church & Dey St.
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C1: SW corner of Broadway & Liberty St.
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J: NE corner of Warren & West St.
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U: Pier 6 Exit 2
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Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-26-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/24/02 0745 to 2220

Data Validation Date: 01/27/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/24/02	LF02381	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02382	P-2	592	Air	<7.0	<0.005	0	0	<7.87	<0.0051
01/24/02	LF02383	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02384	P-4	298	Air	<7.0	<0.009	0	0	<7.87	<0.0102
01/24/02	LF02385	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02386	P-6	653	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/24/02	LF02387	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02388	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02389	W-11	720	Air	42.04	0.022	2***	0	17.50	0.0094
01/24/02	LF02390	W-12A	720	Air	22.93	0.012	2***	0	17.50	0.0094
01/24/02	LF02391	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02392	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02393	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02394	T-15	720	Air	30.57	0.016	0	0	<8.75	<0.0047
01/24/02	LF02395	T-16	720	Air	26.75	0.014	0	0	<8.75	<0.0047
01/24/02	LF02396	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02397	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02398	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02399	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/24/02	LF02400	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/24/02	LF02401	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

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NC - Sample not collected
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-24-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/25/02 0740 to 2230

Data Validation Date: 01/28/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/25/02	LF02402	P-1	720	Air	<7.0	<0.004	0	1***	8.75	0.0047
01/25/02	LF02403	P-2	331	Air	<7.0	<0.008	0	0	<7.87	<0.0092
01/25/02	LF02404	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02405	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02406	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02407	P-6	96****	Air	<7.0	<0.028	0	0	<7.87	<0.0316
01/25/02	LF02408	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02409	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02410	W-11	720	Air	31.85	0.017	4***	2***	52.49	0.0281
01/25/02	LF02411	W-12A	720	Air	14.01	0.0075	2***	1***	26.25	0.0140
01/25/02	LF02412	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02413	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02414	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02415	T-15	720	Air	43.31	0.023	0	0	<8.75	<0.0047
01/25/02	LF02416	T-16	720	Air	8.92	0.005	0	0	<8.75	<0.0047
01/25/02	LF02417	O-17	NS	Air	NS	NS	NS	NS	NS	NS
01/25/02	LF02418	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02419	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02420	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/25/02	LF02421	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/25/02	LF02422	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-25-02-am.xls

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: January 28, 2002

Location	L	N	R
DataRAM I.D. No.	2646	2647	2607
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0821	0831	0817
Stop Time	1427	1429	1423
Run Time (minutes)	366	358	366
Minimum Concentration (ug/m^3)	0.0	0.0	0.0
Maximum Concentration (ug/m^3)	184.1	131.6	140.3
Average Concentration (ug/m^3)	49.8	37.3	36.9

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/28/02

File Name	NYC884	NYC885	NYC886	NYC887	NYC889	NYC888
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07401	A07402	A07404	A07403
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, January 30, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 11:00 a.m. on 1/30

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 42 samples taken in and around ground zero on January 26 and January 27. EPA also sampled for asbestos at two additional lower Manhattan locations on January 24. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,424, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 24. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Thirty-one air samples collected on January 26 and January 27 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on January 29 at Location N (south side of Pier 25), Location R (northwest side of Stuyvesant High School) and Location L (northeast side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 29 in the

direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 29 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, January 30, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 26, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

NYC / ER (Jan 27, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location T) was not collected due to an equipment malfunction.
Note: Low sample volume recorded.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 26, 0740 - 2220)

All 13 samples analyzed were below the TEM AHERA standard.
5 samples (Locations W-11, W-12A, B-14, T-15, and T-16) were not analyzed due to overloading of particulates.
1 sample (Location P-5) was not collected due to an equipment malfunction.
Note: Low sample volume recorded.

Fresh Kills (Jan 27, 0735 - 2225)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location O-17) was not collected due to an equipment malfunction.

Fresh Kills (Jan 29) - Particulate Monitoring (Dataram)

No particulate measurements were conducted due to inoperative equipment.

Ambient Air Sampling Locations

NYC / ER (Jan 24) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
Note: Low sample volumes recorded.

NYC / ER (Jan 29) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 6 hours.
Station L values ranged from 4.3 to 148.5 ug/m^3 with an average of 45.5 ug/m^3.
Station N values ranged from 13.7 to 79.0 ug/m^3 with an average of 35.7 ug/m^3.
Station R values ranged from 21.7 to 99.8 ug/m^3 with an average of 41.4 ug/m^3.

NYC / ER (Jan 29) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.
Note: No plume was noted during the period these samples were collected.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/26/02 1200 to 2359

Data Validation Date: 01/29/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/26/02	RST-03740	L	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/26/02	RST-03741	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03742	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03743	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03744	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03745	F	720	Air	7.64	0.004	1***	0	8.89	0.0048
01/26/02	RST-03746	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03747	A-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03748	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03749	B-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03750	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03751	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03752	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03753	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03754	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03755	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03756	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03757	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03758	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03759	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/26/02	RST-03760	W	720	Air	12.74	0.007	1***	0	8.89	0.0048
01/27/02	FB012702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/27/02	TB012702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
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n/a - Not applicable
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-26-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/27/02 0001 to 1200

Data Validation Date: 01/29/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
01/27/02	RST-03761	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03762	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03763	N	319	Air	<7.0	<0.008	0	0	<8.00	<0.0097
01/27/02	RST-03764	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03765	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03766	F	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/27/02	RST-03767	A	720	Air	8.92	0.005	0	0	<8.89	<0.0048
01/27/02	RST-03768	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03769	C	637	Air	<7.0	<0.004	0	0	<8.00	<0.0048
01/27/02	RST-03770	C-Duplicate	711	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03771	H	345	Air	<7.0	<0.008	0	0	<8.00	<0.0089
01/27/02	RST-03772	I	257	Air	<7.0	<0.010	0	0	<8.00	<0.0120
01/27/02	RST-03773	D	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/27/02	RST-03774	D-Duplicate	356	Air	<7.0	<0.008	0	0	<8.00	<0.0087
01/27/02	RST-03775	K	693	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/27/02	RST-03776	U	670	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/27/02	RST-03777	V	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049
01/27/02	RST-03778	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03779	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03780	E	720	Air	<7.0	<0.004	0	0	<8.00	<0.0043
01/27/02	RST-03781	W	703	Air	15.29	0.008	0	0	<8.89	<0.0049
01/27/02	FB012702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/27/02	TB012702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
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G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-01-27-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/26/02 0740 to 2220

Data Validation Date: 01/28/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
01/26/02	LF02423	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/26/02	LF02424	P-2	82****	Air	<7.0	<0.033	0	0	<7.87	<0.0370
01/26/02	LF02425	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/26/02	LF02426	P-4	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/26/02	LF02427	P-5	NS	Air	NS	NS	NS	NS	NS	NS
01/26/02	LF02428	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/26/02	LF02429	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/26/02	LF02430	P-8	698	Air	15.29	0.008	0	0	<8.75	<0.0048
01/26/02	LF02431	W-11	720	Air	26.75	0.014	NA(1)	NA(1)	NA(1)	NA(1)
01/26/02	LF02432	W-12A	720	Air	<7.0	<0.004	NA(1)	NA(1)	NA(1)	NA(1)
01/26/02	LF02433	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/26/02	LF02434	B-13	664	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/26/02	LF02435	B-14	720	Air	<7.0	<0.004	NA(1)	NA(1)	NA(1)	NA(1)
01/26/02	LF02436	T-15	720	Air	26.75	0.014	NA(1)	NA(1)	NA(1)	NA(1)
01/26/02	LF02437	T-16	720	Air	<7.0	<0.004	NA(1)	NA(1)	NA(1)	NA(1)
01/26/02	LF02438	O-17	701	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/26/02	LF02439	O-18	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/26/02	LF02440	O-19	720	Air	15.29	0.008	0	0	<8.75	<0.0047
01/26/02	LF02441	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/26/02	LF02442	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/26/02	LF02443	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume

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n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-26-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/27/02 0735 to 2225

Data Validation Date: 01/29/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/27/02	LF02444	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02445	P-2	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02446	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02447	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02448	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02449	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02450	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02451	P-8	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/27/02	LF02452	W-11	720	Air	11.46	0.006	0	0	<8.75	<0.0047
01/27/02	LF02453	W-12A	720	Air	19.11	0.010	0	0	<8.75	<0.0047
01/27/02	LF02454	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02455	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02456	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02457	T-15	720	Air	26.75	0.014	0	0	<8.75	<0.0047
01/27/02	LF02458	T-16	720	Air	15.29	0.008	0	0	<8.75	<0.0047
01/27/02	LF02459	O-17	NS	Air	NS	NS	NS	NS	NS	NS
01/27/02	LF02460	O-18	697	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/27/02	LF02461	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02462	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/27/02	LF02463	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/27/02	LF02464	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-27-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/24/02 1200 to 2400

Data Validation Date: 01/28/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/24/02	7093-18-0119	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/24/02	7093-19-0119	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/24/02	7093-15-0117	Manhattan IS #143	54[(a)]	Air	<7.0	<0.050	0	0	<8.00	<0.0570
01/24/02	7094-09-0107	Bronx PS #154	30[(a)]	Air	<7.0	<0.090	0	0	<8.00	<0.1027
01/24/02	7096-12-0113	Queens PS #199	966***	Air	<7.0	<0.003	0	0	<11.43	<0.0046
01/24/02	7095-98-0113	Brooklyn PS #274	156[(a)]	Air	<7.0	<0.017	0	0	<8.00	<0.0197
01/24/02	7097-18-0110	Staten Island PS #44	1176***	Air	<7.0	<0.002	0	0	<13.33	<0.0044

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable
[(a)] - Extremely low sample volume

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-24-02pm.xls

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: January 29, 2002

Location	L	N	R
DataRAM I.D. No.	2646	2607	2647
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0811	0818	0810
Stop Time	1429	1424	1431
Run Time (minutes)	378	366	380
Minimum Concentration (ug/m^3)	4.3	13.7	21.7
Maximum Concentration (ug/m^3)	148.5	79.0	99.8
Average Concentration (ug/m^3)	45.5	35.7	41.4

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/29/02

File Name	NYC893	NYC894	NYC895	NYC896	NYC898	NYC897
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07405	A07406	A07407	A07408
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, January 31, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:45 p.m. on 1/31

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 84 samples taken in and around ground zero from January 27 through January 29. EPA also sampled for asbestos at two additional lower Manhattan locations from January 25 through January 27. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,514, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St, Bronx) and P.S. 199 (329(48th St., Queens) from January 25 through January 27. Samples were also collected at P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) on January 25 and January 27. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Nineteen air samples collected on January 28 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 30 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 30 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, January 31, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 27, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

NYC / ER (Jan 28, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

NYC / ER (Jan 28, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location V) was not sampled due to an equipment malfunction.

NYC / ER (Jan 29, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location V) was not sampled due to an equipment malfunction.
Note: Low sample volume recorded.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 28, 0745 - 2220)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Jan 30) - Particulate Monitoring (Dataram)

No particulate measurements were conducted due to inoperative equipment.

Ambient Air Sampling Locations

NYC / ER (Jan 25 - 27) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 19 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
Samples were not collected from Sites 7 and 8 on January 26 due to equipment malfunctions.

NYC / ER (Jan 30) - Volatile Organics (Mobile Laboratory)

Aside from one compound identified above the detection limit (20 ppbv) at the South Tower (ground level), all other volatile organic compounds were not detected in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/27/02 1200 to 2359

Data Validation Date: 01/30/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/27/02	RST-03782	L	720	Air	<7.0	<0.004	1***	1***	17.78	0.0095
01/27/02	RST-03783	M1	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/27/02	RST-03784	N	720	Air	<7.0	<0.004	2***	0	17.78	0.0095
01/27/02	RST-03785	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03786	Q	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/27/02	RST-03787	F	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/27/02	RST-03788	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03789	B	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/27/02	RST-03790	C	670	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/27/02	RST-03791	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03792	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03793	D	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/27/02	RST-03794	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03795	K-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03796	U	673	Air	<7.0	<0.004	0	0	<8.00	<0.0046
01/27/02	RST-03797	U-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03798	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03799	S	322	Air	<7.0	<0.008	0	0	<8.00	<0.0096
01/27/02	RST-03800	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03801	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/27/02	RST-03802	W	720	Air	19.75	0.011	1***	0	8.89	0.0048
01/28/02	FB012802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/28/02	TB012802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-27-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/28/02 0001 to 1200

Data Validation Date: 01/30/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/28/02	RST-03803	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03804	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03805	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03806	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03807	Q	720	Air	<7.0	<0.004	2***	0	17.78	0.0095
01/28/02	RST-03808	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03809	A	639	Air	<7.0	<0.004	0	1***	8.00	0.0048
01/28/02	RST-03810	B	720	Air	<7.0	<0.004	2***	0	17.78	0.0095
01/28/02	RST-03811	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03812	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03813	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03814	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03815	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03816	U	720	Air	<7.0	<0.004	1****	0	8.89	0.0048
01/28/02	RST-03817	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03818	V-Duplicate	434	Air	<7.0	<0.006	0	0	<8.00	<0.0071
01/28/02	RST-03819	S	337	Air	<7.0	<0.008	0	0	<8.00	<0.0091
01/28/02	RST-03820	S-Duplicate	314	Air	<7.0	<0.009	0	0	<8.00	<0.0098
01/28/02	RST-03821	P	656	Air	<7.0	<0.004	0	0	<8.00	<0.0047
01/28/02	RST-03822	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03823	W	720	Air	17.20	0.009	0	0	<8.89	<0.0048
01/28/02	FB012802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/28/02	TB012802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
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F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
****Actinolite
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NA(2) - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-28-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/28/02 0745 to 2220

Data Validation Date: 01/30/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/28/02	LF02465	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02466	P-2	485	Air	<7.0	<0.006	0	0	<7.87	<0.0063
01/28/02	LF02467	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02468	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02469	P-5	715	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02470	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02471	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02472	P-8	687	Air	<7.0	<0.004	0	0	<8.75	<0.0049
01/28/02	LF02473	W-11	720	Air	22.93	0.012	1***	2****	26.25	0.0140
01/28/02	LF02474	W-12A	720	Air	34.39	0.018	0	0	<8.75	<0.0047
01/28/02	LF02475	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02476	B-13	701	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/28/02	LF02477	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02478	T-15	720	Air	30.57	0.016	0	0	<8.75	<0.0047
01/28/02	LF02479	T-16	720	Air	19.11	0.010	0	0	<8.75	<0.0047
01/28/02	LF02480	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02481	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02482	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/28/02	LF02483	MPHS-20	695	Air	<7.0	<0.004	1***	0	8.75	0.0048
01/28/02	LF02484	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/28/02	LF02485	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Amosite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-28-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/25/02 1200 to 2400

Data Validation Date: 01/30/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/25/02	7093-18-0120	Park Row	1440	Air	10.83	0.003	0	0	<16.00	<0.0043
01/25/02	7093-19-0120	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/25/02	7093-15-0118	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/25/02	7094-09-0108	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/25/02	7096-12-0114	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/25/02	7095-98-0114	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/25/02	7097-18-0111	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-25-02pm.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/26/02 1200 to 2400

Data Validation Date: 01/30/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/26/02	7093-18-0121	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/26/02	7093-19-0121	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/26/02	7093-15-0119	Manhattan IS #143	696***	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/26/02	7094-09-0109	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/26/02	7096-12-0115	Queens PS #199	1286	Air	<7.0	<0.002	0	0	<16.00	<0.0048
01/26/02	7095-98-0115	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS
01/26/02	7097-18-0112	Staten Island PS #44	NS	Air	NS	NS	NS	NS	NS	NS

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-26-02pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/28/02 1200 to 2359

Data Validation Date: 01/31/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
01/28/02	RST-03824	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03825	L-Duplicate	395	Air	<7.0	<0.007	0	0	<8.00	<0.0078
01/28/02	RST-03826	M1	720	Air	7.64	0.004	0	0	<10.00	<0.0053
01/28/02	RST-03827	M1-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03828	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03829	J	373	Air	<7.0	<0.007	0	0	<8.00	<0.0083
01/28/02	RST-03830	Q	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/28/02	RST-03831	F	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/28/02	RST-03832	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03833	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03834	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03835	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03836	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03837	D	720	Air	10.19	0.005	0	0	<8.89	<0.0048
01/28/02	RST-03838	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03839	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03840	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	-	V	NS	Air	NS	NS	NS	NS	NS	NS
01/28/02	RST-03841	S	568	Air	<7.0	<0.005	0	0	<8.00	<0.0054
01/28/02	RST-03842	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/28/02	RST-03843	E	720	Air	<7.0	<0.004	0	0	<8.00	<0.0043
01/28/02	RST-03844	W	720	Air	14.01	0.007	0	0	<8.89	<0.0048
01/29/02	FB012902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/29/02	TB012902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (filters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-28-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/29/02 0001 to 1200

Data Validation Date: 01/31/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/29/02	RST-03845	L	664	Air	<7.0	<0.004	1***	0	8.00	0.0046
01/29/02	RST-03846	M1	620	Air	<7.0	<0.004	0	0	<8.00	<0.0050
01/29/02	RST-03847	N	678	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/29/02	RST-03848	N-Duplicate	345	Air	<7.0	<0.008	0	0	<8.00	<0.0089
01/29/02	RST-03849	J	335	Air	<7.0	<0.008	0	0	<8.00	<0.0092
01/29/02	RST-03850	J-Duplicate	465	Air	<7.0	<0.006	0	0	<8.00	<0.0066
01/29/02	RST-03851	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03852	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03853	A	720	Air	12.74	0.007	2***	0	17.78	0.0095
01/29/02	RST-03854	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03855	C	720	Air	<7.0	<0.004	1***	2***	26.67	0.0143
01/29/02	RST-03856	H	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/29/02	RST-03857	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03858	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03859	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03860	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03861	U	241	Air	<7.0	<0.011	0	0	<8.00	<0.0128
01/29/02	-	V	NS	Air	NS	NS	NS	NS	NS	NS
01/29/02	RST-03862	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03863	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03864	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03865	W	720	Air	12.10	0.006	0	0	<8.89	<0.0048
01/29/02	FB012902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/29/02	TB012902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
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P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-29-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/27/02 1200 to 2400

Data Validation Date: 01/31/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/27/02	7093-18-0122	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/27/02	7093-19-0122	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/27/02	7093-15-0120	Manhattan IS #143	1390	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/27/02	7094-09-0110	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/27/02	7096-12-0116	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/27/02	7095-98-0116	Brooklyn PS #274	1212	Air	<7.0	<0.002	0	0	<13.33	<0.0042
01/27/02	7097-18-0113	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-27-02pm.xls

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/30/02

File Name	NYC901	NYC902	NYC903	NYC904	NYC906	NYC905
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07409	A07410	A07411	A07412
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	22
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, February 1, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 1:00 p.m. on 2/1

Staten Island Landfill:

Metals - Five air samples were collected on January 10 and analyzed for metals. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Ambient Air Samples:

Dioxin - A total of 29 samples were collected on January 10, 15 and 18 at various locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Metals - Ten samples were collected on January 10 at various locations in Lower Manhattan. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

PCBs - Nine samples were collected on January 15 at various locations in Lower Manhattan. PCBs were not detected.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on January 30 and January 31 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on January 30 and January 31 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, February 1, 2002

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 10) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

Ambient Air Sampling Locations

NYC / ER (Jan 10) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 15) - Dioxin

All 9 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
1 sample (Location S) was not collected due to sampling equipment damage.
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 18) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 10) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 15) - PCBs

All 9 samples analyzed did not detect any PCBs.
1 sample (Location S) was not collected due to sampling equipment damage.

NYC / ER (Jan 30-31) - Particulate Monitoring (Dataram)

No particulate measurements were conducted at Stations L, N, and R due to the weather conditions.

NYC / ER (Jan 30) - Volatile Organics (Mobile Laboratory)

Resubmittal: for clarification of sampling locations from January 30.
The sample from the Austin Tobin Plaza location was collected in the breathing zone at the B-4 level.
The sample from the North Tower location was collected in the breathing zone with no steam/smoke plume observed.
The sample from the South Tower location was collected in the breathing zone at the B-5 level with no steam/smoke plume observed.
Aside from one compound identified above the detection limit (20 ppbv) at the South Tower (ground level), all other volatile organic compounds were not detected in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

NYC / ER (Jan 31) - Volatile Organics (Mobile Laboratory)

The sample from the Austin Tobin Plaza location was collected in the breathing zone at the B-5 level.
The sample from the North Tower location was collected near the ground level from a steam/smoke plume.
The sample from the South Tower location was collected in the breathing zone at the B-6 level.
Benzene was not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.
A limited number of VOCs were detected above the detection limit (20 ppbv) in only the North Tower ground level sample.

Air Samples - dioxin and furan results
Sampling Date 1/18/02

Sample No.	WG7057-1			06201			06202			06203			06204			06205			06206		
Sampling Location	Method Blank			R- TAGA			Location A			Location 3A			B-Church & Dey St.			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			5222			7425			6558.75			4441.25			4785			5685		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0038	U		0.0027	U		0.0030	U		0.0045	U		0.0042	U		0.0035
12378-PeCDD	U		0.10	U		0.019	U		0.013	U		0.015	U		0.023	U		0.021	U		0.018
123478-HxCDD	U		0.10	U		0.019	U		0.013	U		0.015	U		0.023	U		0.021	U		0.018
123678-HxCDD	U		0.10	U		0.019	U		0.013	U		0.015	U		0.023	U		0.021	U		0.018
123789-HxCDD	U		0.10	U		0.019	U		0.013	U		0.015	U		0.023	U		0.021	U		0.018
1234678-HpCDD	0.0075 J		0.10	U	0.0013	0.019	0.0011 J		0.013	U	0.0011	0.015	U	0.0018	0.023	0.0018 J		0.021	U	0.0011	0.018
OCDD	0.0157 J		0.20	U		0.038	U		0.027	U		0.030	U	0.0042	0.045	U	0.0049	0.042	U		0.035
2378-TCDF	U		0.020	U		0.0038	U		0.0027	U		0.0030	U		0.0045	U		0.0042	U		0.0035
12378-PeCDF	U	0.0023	0.10	U		0.019	U		0.013	U		0.015	0.0003 J		0.023	U		0.021	U		0.018
23478-PeCDF	U		0.10	U		0.019	U		0.013	U		0.015	U		0.023	U		0.021	U		0.018
123478-HxCDF	U		0.10	U		0.019	U		0.013	U		0.015	U		0.023	U		0.021	U		0.018
123678-HxCDF	U		0.10	U		0.019	U	0.0004	0.013	0.0003 J		0.015	U		0.023	0.0004 J		0.021	U		0.018
234678-HxCDF	U	0.0028	0.10	U		0.019	U	0.0003	0.013	U		0.015	U		0.023	U		0.021	U		0.018
123789-HxCDF	U		0.10	U		0.019	U		0.013	U		0.015	U		0.023	U		0.021	U		0.018
1234678-HpCDF	U		0.10	U		0.019	U	0.0006	0.013	0.0007 J		0.015	0.0007 J		0.023	0.0007 J		0.021	U		0.018
1234789-HpCDF	U		0.10	U		0.019	U		0.013	U		0.015	U		0.023	U		0.021	U		0.018
OCDF	U		0.20	U		0.038	U		0.027	U		0.030	U		0.045	U		0.042	U		0.035
Total TCDDs	U			U			U			U			U			0.0007			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	0.0075			U			0.0011			U			U			0.0023			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			0.0003			U			0.0003			U			U		
Total HxCDFs	U			U			0.0004			0.0003			U			U			U		
Total HpCDFs	U			U			U			U			U			0.0007			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0001			0.0000			0.0000			0.0000			0.0000			0.0001			0.0000		
TEQ (ND=1/2)	0.0399			0.0011			0.0006			0.0007			0.0009			0.0008			0.0009		

COC# 01/18/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/30/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

Air Samples - dioxin and furan results
Sampling Date 1/18/02

Sample No.	06207			06208			06209			06210			06211			06212		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			Location S			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	5571.75			5835			5220			5775			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0036	U		0.0034	U		0.0038	U		0.0035	U		0.020	U		0.020
12378-PeCDD	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
123478-HxCDD	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
123678-HxCDD	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
123789-HxCDD	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
1234678-HpCDD	0.0012 J		0.018	U	0.0011	0.017	0.0013 J		0.019	U	0.0009	0.017	U	0.0058	0.10	U	0.0051	0.10
OCDD	U		0.036	U	0.0028	0.034	U		0.038	U	0.0032	0.035	U		0.20	0.0148 J		0.20
2378-TCDF	U		0.0036	U		0.0034	U		0.0038	U		0.0035	U		0.020	U		0.020
12378-PeCDF	U		0.018	U	0.0003	0.017	U		0.019	U		0.017	U		0.10	U		0.10
23478-PeCDF	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
123478-HxCDF	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
123678-HxCDF	U		0.018	0.0004 J		0.017	0.0004 J		0.019	U		0.017	U		0.10	U		0.10
234678-HxCDF	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
123789-HxCDF	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
1234678-HpCDF	U		0.018	U	0.0005	0.017	U		0.019	U		0.017	U		0.10	U		0.10
1234789-HpCDF	U		0.018	U		0.017	U		0.019	U		0.017	U		0.10	U		0.10
OCDF	U		0.036	U		0.034	U		0.038	U		0.035	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	0.0018			U			0.0013			U			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			0.0004			0.0004			U			U			U		
Total HpCDFs	0.0009			U			U			0.0007			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0001			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0009			0.0008			0.0011			0.0008			0.0401			0.0401		

COC# 01/18/02 dioxin

WA # 0-236 New York (WTC) ER site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		06123		06124		06113	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		R(TAGA)	
Air Volume (L)		-		-		-		0		0		4650	
Date Collected		-		-		-		01/10/02		01/10/02		01/10/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.27
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.027
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.027
Calcium	ICAP	3.9	2.5	3.9	2.5	3.8	2.5	U	2.5	U	2.5	0.64	0.54
Chromium	ICAP	0.63	0.13	0.78	0.13	0.76	0.13	0.21	0.13	0.41	0.13	0.05	0.027
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.054
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.054
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.57	0.13
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.059	0.011
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.7
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.027
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.054
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	11
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.027
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.7
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.054
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.09	0.054

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06114		06115		06116		06117		06118		06119	
Location		A-BARCLAY ST. & WEST BROADWAY		LOC 3B CHURCH & VESEY ST		B-CHURCH & DEY ST.		B-CHURCH & DEY ST.		C-LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.	
Air Volume (L)		4080		4710		3032		4350		3320		3340	
Date Collected		01/10/02		01/10/02		01/10/02		01/10/02		01/10/02		01/10/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.6	0.31	0.41	0.27	U	0.41	0.41	0.29	0.47	0.38	U	0.37
Antimony	AA-Fur	U	0.012	U	0.011	U	0.017	U	0.012	U	0.015	U	0.015
Arsenic	AA-Fur	0.019	0.012	U	0.011	U	0.017	U	0.012	U	0.015	U	0.015
Barium	ICAP	0.05	0.031	0.029	0.027	U	0.041	0.03	0.029	0.038	0.038	U	0.037
Beryllium	ICAP	U	0.012	U	0.011	U	0.016	U	0.011	U	0.015	U	0.015
Cadmium	ICAP	U	0.031	U	0.027	U	0.041	U	0.029	U	0.038	U	0.037
Calcium	ICAP	14	0.61	2.9	0.53	2.2	0.82	3.1	0.57	2.9	0.75	1.7	0.75
Chromium	ICAP	0.052	0.031	0.035	0.027	0.09	0.041	U	0.029	U	0.038	0.075	0.037
Cobalt	ICAP	U	0.061	U	0.053	U	0.082	U	0.057	U	0.075	U	0.075
Copper	ICAP	0.15	0.061	0.058	0.053	U	0.082	U	0.057	U	0.075	U	0.075
Iron	ICAP	14	0.15	3.5	0.13	2.2	0.21	2.1	0.14	2.6	0.19	1.2	0.19
Lead	AA-Fur	0.12	0.012	0.059	0.011	0.03	0.017	0.032	0.012	0.032	0.015	0.03	0.015
Magnesium	ICAP	U	3.1	U	2.7	U	4.1	U	2.9	U	3.8	U	3.7
Manganese	ICAP	0.19	0.031	0.056	0.027	U	0.041	0.036	0.029	0.038	0.038	U	0.037
Nickel	ICAP	U	0.061	U	0.053	U	0.082	U	0.057	U	0.075	U	0.075
Potassium	ICAP	U	12	U	11	U	16	U	11	U	15	U	15
Selenium	AA-Fur	U	0.012	U	0.011	U	0.017	U	0.012	U	0.015	U	0.015
Silver	ICAP	U	0.031	U	0.027	U	0.041	U	0.029	U	0.038	U	0.037
Sodium	ICAP	3.5	3.1	U	2.7	U	4.1	U	2.9	U	3.8	U	3.7
Thallium	AA-Fur	U	0.012	U	0.011	U	0.017	U	0.012	U	0.015	U	0.015
Vanadium	ICAP	U	0.061	U	0.053	U	0.082	U	0.057	U	0.075	U	0.075
Zinc	ICAP	0.43	0.061	0.23	0.053	0.14	0.082	0.15	0.057	0.19	0.075	0.11	0.075

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06120		06121		06122	
Location		P-ALBANY ST. & SOUTHEND AVE		3-RECTOR PLACE & SOUTHEND AVE		E-LIBERTY ST. & SOUTHEND AVE	
Air Volume (L)		4240		4958.5		4630	
Date Collected		01/10/02		01/10/02		01/10/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.74	0.29	0.41	0.25	0.34	0.27
Antimony	AA-Fur	U	0.012	U	0.01	U	0.011
Arsenic	AA-Fur	U	0.012	U	0.01	U	0.011
Barium	ICAP	0.043	0.029	0.039	0.025	0.027	0.027
Beryllium	ICAP	U	0.012	U	0.01	U	0.011
Cadmium	ICAP	U	0.029	U	0.025	U	0.027
Calcium	ICAP	6.2	0.59	2.0	0.5	1.9	0.54
Chromium	ICAP	0.14	0.029	0.053	0.025	0.07	0.027
Cobalt	ICAP	U	0.059	U	0.05	U	0.054
Copper	ICAP	0.066	0.059	U	0.05	U	0.054
Iron	ICAP	2.6	0.15	1.5	0.13	0.97	0.13
Lead	AA-Fur	0.06	0.012	0.037	0.01	0.069	0.011
Magnesium	ICAP	U	2.9	U	2.5	U	2.7
Manganese	ICAP	0.044	0.029	0.026	0.025	U	0.027
Nickel	ICAP	U	0.059	U	0.05	U	0.054
Potassium	ICAP	U	12	U	10	U	11
Selenium	AA-Fur	U	0.012	U	0.01	U	0.011
Silver	ICAP	U	0.029	U	0.025	U	0.027
Sodium	ICAP	4.0	2.9	3.8	2.5	2.9	2.7
Thallium	AA-Fur	U	0.012	U	0.01	U	0.011
Vanadium	ICAP	U	0.059	U	0.05	U	0.054
Zinc	ICAP	0.13	0.059	0.10	0.05	0.098	0.054

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/10/02

Sample No.	WG7044-1			06101			06102			06103			06104			06105			06106		
Sampling Location	Method Blank			R- TAGA			A-Barclay & West Broadway			Loc 3B Church & Vesey			B-Church & Dey St.			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			7455			8040			5250			6438			6615			6566		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0027	U		0.0025	U		0.0038	U		0.0031	U		0.0030	U		0.0030
12378-PeCDD	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
123478-HxCDD	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
123678-HxCDD	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
123789-HxCDD	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
1234678-HpCDD	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
OCDD	U		0.20	U	0.0076	0.027	U		0.025	U		0.038	U	0.0053	0.031	U		0.030	U		0.030
2378-TCDF	U		0.020	U		0.0027	U		0.0025	U		0.0038	U		0.0031	U		0.0030	U		0.0030
12378-PeCDF	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
23478-PeCDF	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
123478-HxCDF	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
123678-HxCDF	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
234678-HxCDF	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
123789-HxCDF	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
1234678-HpCDF	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
1234789-HpCDF	U		0.10	U		0.013	U		0.012	U		0.019	U		0.016	U		0.015	U		0.015
OCDF	U		0.20	U		0.027	U		0.025	U		0.038	U		0.031	U		0.030	U		0.030
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	U			0.0023			0.0011			U			U			0.0009			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0415			0.0020			0.0014			0.0018			0.0017			0.0015			0.0018		

COC# 04389
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/28/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

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NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/10/02

Sample No.	06107			06108			06109			06110			06111			06112		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			S-Rector Place & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7005			6165			6002			6726			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0029	U		0.0032	U		0.0033	U		0.0030	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.016	U		0.017	U		0.015	U		0.10	U		0.10
123478-HxCDD	U		0.014	U		0.016	U		0.020	U		0.015	U		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.016	U		0.017	U	0.0004	0.015	U		0.10	U	0.0044	0.10
123789-HxCDD	U		0.014	U		0.016	U		0.017	U	0.0004	0.015	U		0.10	U		0.10
1234678-HpCDD	U	0.0011	0.014	U		0.016	U	0.0015	0.017	U	0.0013	0.015	U		0.10	0.0060 J		0.10
OCDD	U		0.029	U		0.032	U		0.033	U	0.0033	0.030	U	0.0183	0.20	0.0149 J		0.20
2378-TCDF	U		0.0029	U		0.0032	U		0.0033	U		0.0030	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.016	U		0.017	U		0.015	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.016	U		0.017	U		0.015	U		0.10	U		0.10
123478-HxCDF	U	0.0003	0.014	U	0.0004	0.016	U	0.0002	0.017	U		0.015	U		0.10	U		0.10
123678-HxCDF	U	0.0004	0.014	U	0.0005	0.016	0.0005 J		0.017	U		0.015	U		0.10	U		0.10
234678-HxCDF	U	0.0003	0.014	U	0.0003	0.016	U		0.017	U		0.015	U		0.10	U		0.10
123789-HxCDF	U		0.014	U	0.0006	0.016	U	0.0003	0.017	U		0.015	U		0.10	U		0.10
1234678-HpCDF	0.0004 J		0.014	U	0.0006	0.016	U		0.017	0.0003 J		0.015	U		0.10	U		0.10
1234789-HpCDF	U		0.014	U	0.0005	0.016	U		0.017	U		0.015	U		0.10	U		0.10
OCDF	U		0.029	U		0.032	U		0.033	U		0.030	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			0.0008			0.0006			U			U			0.0091		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			0.0005			U			U			U		
Total HpCDFs	0.0004			U			U			0.0003			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0001			0.0000			0.0000			0.0001		
TEQ (ND=1/2)	0.0014			0.0011			0.0012			0.0011			0.0401			0.0399		

COC# 04389

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NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/15/02

Sample No.	WG-7055-1P		06151		06152		06153		06154		06155		06156	
Sampling Location	Method Blank		R		A		3A		B		B		C	
Sample Volume (L)	0		6735		6554		7170		6149		7215		6270	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of MoCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of DiCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of TrCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of TeCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of PeCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of HxCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of HpCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of OcCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Sum of NoCBs	U	10.0	U	1.48	U	1.53	U	1.39	U	1.63	U	1.39	U	1.59
Total	0		0		0		0		0		0		0	

COC# 01/15/02-dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 1/30/02

1-15-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/15/02

Sample No.	06157		06158		06159		06160		06161	
Sampling Location	D		P		E		Field Blank		Lot Blank	
Sample Volume (L)	5412.5		6735		7302.5		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of MoCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of DiCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of TrCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of TeCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of PeCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of HxCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of HpCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of OcCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Sum of NoCBs	U	1.85	U	1.48	U	1.37	U	10.0	U	10.0
Total	0		0		0		0		0	

COC# 01/15/02-dioxin

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/15/02

Sample No.	WG7055-1			06151			06152			06153			06154			06155			06156		
Sampling Location	Method Blank			R- TAGA			A-Barclay & West Broadway			Location 3A			B-Church & Dey St.			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			6735			6554			7170			6149			7215			6270		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0030	U		0.0031	U		0.0028	U		0.0033	U		0.0028	U		0.0032
12378-PeCDD	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
123478-HxCDD	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
123678-HxCDD	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
123789-HxCDD	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
1234678-HpCDD	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
OCDD	U	0.0218	0.20	U		0.030	U	0.0039	0.031	0.0033 J		0.028	U	0.0019	0.033	0.0037 J		0.028	U		0.032
2378-TCDF	U		0.020	U		0.0030	U		0.0031	U		0.0028	U		0.0033	U		0.0028	U		0.0032
12378-PeCDF	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
23478-PeCDF	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
123478-HxCDF	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
123678-HxCDF	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
234678-HxCDF	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
123789-HxCDF	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
1234678-HpCDF	U		0.10	U		0.015	0.0007 J		0.015	U		0.014	U		0.016	U		0.014	U		0.016
1234789-HpCDF	U		0.10	U		0.015	U		0.015	U		0.014	U		0.016	U		0.014	U		0.016
OCDF	U		0.20	U		0.030	U		0.031	U		0.028	U		0.033	U		0.028	U		0.032
Total TCDDs	U			U			0.0009			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			0.0007			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0401			0.0012			0.0013			0.0013			0.0014			0.0012			0.0020		

COC# 01/15/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 1/30/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

1-15-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/15/02

Sample No.	06157			06158			06159			06160			06161		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	5412.5			6735			7302.5			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0037	U		0.0030	U		0.0027	U		0.020	U		0.020
12378-PeCDD	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
123478-HxCDD	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
123678-HxCDD	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
123789-HxCDD	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
1234678-HpCDD	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
OCDD	U		0.037	0.0032 J		0.030	U		0.027	U		0.20	U		0.20
2378-TCDF	U		0.0037	U		0.0030	U		0.0027	U		0.020	U		0.020
12378-PeCDF	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
23478-PeCDF	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
123478-HxCDF	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
123678-HxCDF	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
234678-HxCDF	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
123789-HxCDF	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
1234678-HpCDF	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
1234789-HpCDF	U		0.018	U		0.015	U		0.014	U		0.10	U		0.10
OCDF	U		0.037	U		0.030	U		0.027	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U		
Total PeCDDs	U			U			U			U			U		
Total HxCDDs	U			U			U			U			U		
Total HpCDDs	U			U			U			U			U		
Total TCDFs	U			U			U			U			U		
Total PeCDFs	U			U			U			U			U		
Total HxCDFs	U			U			U			U			U		
Total HpCDFs	U			U			U			U			U		
Total Adjusted Conc															
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0020			0.0017			0.0013			0.0401			0.0401		

COC# 01/15/02 dioxin

1-15-02dioair.xls

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 01/31/02

File Name	NYC911	NYC912	NYC913	NYC914	NYC916	NYC915
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07413	A07414	A07415	A07416
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	**100**	RL
Acetone	RL	RL	RL	RL	**280**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**26**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**24**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday-Monday, February 2-4, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:00 p.m. on 2/4

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 43 samples taken in and around ground zero on January 29 and January 30. EPA also sampled for asbestos at two additional lower Manhattan locations on January 28. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,559, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St, Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 28. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Nineteen air samples collected on January 29 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from January 27 through February 1 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from January 27 through February 1 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted from February 1 through February 3 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from February 1 through February 3 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, February 4, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 29, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 30, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-duplicate) was not collected due to sampling equipment damage.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 29, 0745 - 2225)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Jan 31 - Feb 2) - Particulate Monitoring (Dataram)

No particulate measurements were conducted due to inoperative equipment.

Ambient Air Sampling Locations

NYC / ER (Jan 28) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 27) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***16.12 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***16.56 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***15.29 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 27) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***24.74 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 28) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***21.14 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***22.84 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***22.27 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 28) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***38.69 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 29) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***24.16 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***24.90 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***24.59 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 29) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***42.13 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 30) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***14.89 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***18.40 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***16.75 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 30) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***28.95 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 31) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***8.60 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.49 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.79 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Jan 31) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***17.82 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 1) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***10.74 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.44 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***13.34 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 1) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***20.24 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 1) - Particulate Monitoring (Dataram)

No particulate measurements were conducted at Stations L, N, and R due to the weather conditions.

NYC / ER (Feb 1) - Volatile Organics (Mobile Laboratory)

Aside from several compounds identified above the detection limit (20 ppbv) at the North Tower (ground level), all other volatile organic compounds were not detected in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).
Note: There was no plume (smoke/steam vent) present at the South Tower location when the sample was collected.

NYC / ER (Feb 2) - Volatile Organics (Mobile Laboratory)

Aside from one compound identified above the detection limit (20 ppbv) at the Washing Tent, all other volatile organic compounds were not detected in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).
Note: The Austin Tobin Plaza sample was collected at ground level.

NYC / ER (Feb 3) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).
Note: The samples from the Austin Tobin Plaza (B-5 level), South Tower (B-4 level), and the North Tower locations were collected in the breathing zone.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/29/02 1200 to 2359

Data Validation Date: 02/01/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/29/02	RST-03866	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03867	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03868	N	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/29/02	RST-03869	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03870	Q	720	Air	10.83	0.006	0	0	<8.89	<0.0048
01/29/02	RST-03871	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03872	A	720	Air	13.38	0.007	2***	0	17.78	0.0095
01/29/02	RST-03873	B	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/29/02	RST-03874	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03875	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03876	H-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03877	I	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/29/02	RST-03878	I-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03879	D	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/29/02	RST-03880	K	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/29/02	RST-03881	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03882	U	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/29/02	RST-03883	V	720	Air	<7.0	<0.004	0	1****	8.89	0.0048
01/29/02	RST-03884	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/29/02	RST-03885	P	720	Air	8.28	0.004	0	0	<8.89	<0.0048
01/29/02	RST-03886	E	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/29/02	RST-03887	W	720	Air	<7.0	<0.004	3***	0	26.67	0.0143
01/30/02	FB013002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/30/02	TB013002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Amosite

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-29-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/30/02 0001 to 1200

Data Validation Date: 02/01/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/30/02	RST-03888	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03889	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03890	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03891	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03892	Q	707	Air	7.01	0.004	0	0	<8.89	<0.0048
01/30/02	RST-03893	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03894	A	720	Air	9.55	0.005	0	0	<8.89	<0.0048
01/30/02	RST-03895	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03896	C	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/30/02	RST-03897	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03898	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03899	D	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/30/02	RST-03900	K	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/30/02	RST-03901	T	693	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/30/02	RST-03902	U	720	Air	7.01	0.004	0	0	<8.89	<0.0048
01/30/02	RST-03903	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03904	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03905	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	-	P-Duplicate	NS	Air	NS	NS	NS	NS	NS	NS
01/30/02	RST-03906	E	711	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03907	E-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/30/02	RST-03908	W	720	Air	15.29	0.008	0	0	<8.89	<0.0048
01/30/02	FB013002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/30/02	TB013002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) In proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-30-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/29/02 0745 to 2225

Data Validation Date: 02/01/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/29/02	LF02486	P-1	720	Air	11.46	0.006	0	0	<8.75	<0.0047
01/29/02	LF02487	P-2	299	Air	<7.0	<0.009	1***	1***	15.75	0.0203
01/29/02	LF02488	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02489	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02490	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02491	P-6	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/29/02	LF02492	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02493	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02494	W-11	720	Air	11.46	0.006	1***	0	8.75	0.0047
01/29/02	LF02495	W-12A	720	Air	45.86	0.025	1***	0	8.75	0.0047
01/29/02	LF02496	W-12B	643	Air	<7.0	<0.004	0	0	<8.75	<0.0052
01/29/02	LF02497	B-13	720	Air	<7.0	<0.004	0	1***	8.75	0.0047
01/29/02	LF02498	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02499	T-15	720	Air	34.39	0.018	0	0	<8.75	<0.0047
01/29/02	LF02500	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02501	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02502	O-18	720	Air	7.64	0.004	0	0	<8.75	<0.0047
01/29/02	LF02503	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02504	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/29/02	LF02505	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/29/02	LF02506	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-01-29-02-am.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/28/02 1200 to 2400

Data Validation Date: 02/01/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/28/02	7093-18-0123	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/28/02	7093-19-0123	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/28/02	7093-15-0121	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/28/02	7094-09-0111	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/28/02	7096-12-0117	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/28/02	7095-98-0117	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/28/02	7097-18-0114	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile

NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-28-02pm.xls

DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/03/02

File Name	NYC939	NYC940	NYC941	NYC9342	NYC944	NYC943
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Ten: Ambient Air	Austin Tobin Plaza	North Tower Plume	South Tower Plume
Sample Number			A07425	A07426	A07428	A07427
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/02/02

File Name	NYC930	NYC931	NYC932	NYC933	NYC935	NYC934
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07421	A07422	A07423	A07424
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	**22**	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/01/02

File Name	NYC919	NYC920	NYC921	NYC925	NYC923	NYC922
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air		Plume	Plume
Sample Number			A07417	A07419	A07420	A07418
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	**140**	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**44**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	**450**	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	**34**	RL
o-Xylene	RL	RL	RL	RL	**24**	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, February 5, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:30 p.m. on 2/5

Ambient Air Samples:

PCBs - Ten samples were collected on January 18 at various locations in Lower Manhattan. PCBs were not detected.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 4 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 4 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, February 5, 2002

Ambient Air Sampling Locations

NYC / ER (Jan 18) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Feb 4) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/18/02

Sample No.	WG-7057-1P		06201		06202		06203		06204		06205		06206	
Sampling Location	Method Blank		R		A		3A		B		B		C	
Sample Volume (L)	0		5222		7425		6558.75		4441.25		4785		5685	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of MoCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of DiCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of TrCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of TeCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of PeCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of HxCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of HpCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of OcCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Sum of NoCBs	U	10.0	U	1.91	U	1.35	U	1.52	U	2.25	U	2.09	U	1.76
Total	0		0		0		0		0		0		0	

COC# 01/18/02-dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 1/31/02

1-18-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/18/02

Sample No.	06207		06208		06209		06210		06211		06212	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	5571.75		5835		5220		5775		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of MoCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of DiCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of TrCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of TeCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of PeCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of HxCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of HpCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of OcCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Sum of NoCBs	U	1.79	U	1.71	U	1.92	U	1.73	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 01/18/02-dioxin

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/04/02

File Name	NYC949	NYC950	NYC951	NYC9352	NYC954	NYC953
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07429	A07430	A07432	A07431
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, February 6, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 10:30 a.m. on 2/7

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 4 and February 5 at Location N (south side of Pier 25) and Location R (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Dioxin - A total of 11 samples were collected from January 7 through January 21 at several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 5 and February 6 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 5 and February 6 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, February 6, 2002

Ambient Air Sampling Locations

NYC / ER (Jan 7 - Jan 21) - Dioxin (EPA-ORD)

Eleven (11) 72-hour samples were collected during this period at Park Row (4 samples), Chambers St./West St. (3 samples), and Albany St. (4 samples) at roof top locations.
One (1) 48-hour sample was collected (due to equipment problems) during this period at Chambers St./West St. at a roof top location.
None of the samples collected were above the EPA Removal Action guidelines (based on a 30-year exposure).
Note: The analytical results for all of these samples indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.
Data is not attached.

NYC / ER (Feb 4) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations N and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Measurements were not conducted at Station L due to an equipment malfunction.
Station N values ranged from 3.4 to 656.3 ug/m^3 with an average of 23.5 ug/m^3.
Station R values ranged from 0.0 to 1,080.7 ug/m^3 with an average of 25.2 ug/m^3.

NYC / ER (Feb 5) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations N and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Measurements were not conducted at Station L due to an equipment malfunction.
Station N values ranged from 3.3 to 15,801.1 ug/m^3 with an average of 25.4 ug/m^3.
Station R values ranged from 0.2 to 4,278.3 ug/m^3 with an average of 20.7 ug/m^3.

NYC / ER (Feb 5) - Volatile Organics (Mobile Laboratory)

Aside from two compounds identified above the detection limit (20 ppbv) at three of the four locations, all other volatile organic compounds were not detected in any of the four samples collected.
Note: No visible plumes noted in these areas.

NYC / ER (Feb 6) - Volatile Organics (Mobile Laboratory)

Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, and South Tower), including in the debris area at ground level.
Benzene did not exceed OSHA TWA PEL (1 ppm) at the North Tower, where it was detected.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 5, 2002

Location	L*	N	R
DataRAM I.D. No.	D074	2627	2642
Flow Rate (liters/minute)	-	2.0	2.0
Start Time	-	0700	0700
Stop Time	-	1456	1458
Run Time (minutes)	-	476	478
Minimum Concentration (ug/m^3)	-	3.3	0.2
Maximum Concentration (ug/m^3)	-	15801.1	4,278.3
Average Concentration (ug/m^3)	-	25.4	20.7

* equipment malfunction

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 4, 2002

Location	L*	N	R
DataRAM I.D. No.	2475	2627	2642
Flow Rate (liters/minute)	-	2.0	2.0
Start Time	-	0630	0630
Stop Time	-	1440	1447
Run Time (minutes)	-	500	507
Minimum Concentration (ug/m^3)	-	3.4	0.0
Maximum Concentration (ug/m^3)	-	656.3	1,080.7
Average Concentration (ug/m^3)	-	23.5	25.2

* equipment malfunction

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/06/02

File Name	NYC973	NYC974	NYC975	NYC976	NYC978	NYC977
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07437	A07438	A07440	A07439
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**27**	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	**34**	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**45**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	**70**	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**27**
MTBE	RL	RL	RL	RL	**28**	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**53**	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**27**	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/05/02

File Name	NYC965	NYC966	NYC967	NYC968	NYC970	NYC969
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07433	A07434	A07436	A07435
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	**24**	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	**33**	**33**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, February 7, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on February 7

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 100 samples taken in and around ground zero from January 30 through February 2. EPA also sampled for asbestos at two additional lower Manhattan locations on January 29 and January 30. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,663, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St, Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 29 and January 30. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Fifty-one air samples collected from January 30 through February 1 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Dioxin - A total of 10 samples were collected on January 22 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

PCBs - A total of 10 samples were collected on January 22 from several locations in Lower

Manhattan. PCBs were not detected.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, February 7, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Jan 30, 1200 - 2359 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 31, 0001 - 1200 hrs)

All 22 samples analyzed were below the TEM AHERA standard.

NYC / ER (Jan 31, 1200 - 2359 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
3 samples (Locations C, F, and V-duplicate) were not collected due to equipment malfunctions.

NYC / ER (Feb 1, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
4 samples (Locations J, C, H-duplicate, and W) were not collected due to equipment malfunctions and/or not submitted for analysis.

NYC / ER (Feb 1, 1200 - 2359 hrs)

Results pending.

NYC / ER (Feb 2, 0001 - 1200 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
2 samples (Locations F and I) were not collected due to equipment malfunctions.
1 location (Location T) was not sampled since access was not available.

Landfill Ambient Air Sampling Locations

Fresh Kills (Jan 30, 0843 - 2329 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
2 samples (Locations P-5 and B-13) were not collected due to equipment malfunctions.

Fresh Kills (Jan 31, 0830 - 2207 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 1, 0830 - 2230 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
2 samples (Locations P-2 and T-15) were not collected due to equipment malfunctions.
2 samples (Locations W-11 and W-12A) were not analyzed due to overloading of particulates.

Ambient Air Sampling Locations

NYC / ER (Jan 22) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 22) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Jan 29 - 30) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/29/02 1200 to 2400

Data Validation Date: 02/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/29/02	7093-18-0124	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0042
01/29/02	7093-19-0124	Chambers Street	1440	Air	7.64	0.002	0	0	<16.00	<0.0042
01/29/02	7093-15-0122	IS 143-Manhattan	1392	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/29/02	7094-09-0112	PS 154-Bronx	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0042
01/29/02	7096-12-0118	PS 199-Queens	1440	Air	7.64	0.002	0	0	<16.00	<0.0042
01/29/02	7095-98-0118	PS 274-Brooklyn	1390	Air	10.19	0.003	0	0	<16.00	<0.0044
01/29/02	7097-18-0115	PS 44-Staten Island	1390	Air	<7.0	<0.002	0	0	<16.00	<0.0044

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-29-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/30/02 1200 to 2400

Data Validation Date: 02/03/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
01/30/02	7093-18-0125	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/30/02	7093-19-0125	Chambers Street	1138	Air	<7.0	<0.002	0	0	<13.33	<0.0045
01/30/02	7093-15-0123	IS 143-Manhattan	1396	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/30/02	7094-09-0113	PS 154-Bronx	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/30/02	7096-12-0119	PS 199-Queens	1386	Air	<7.0	<0.002	0	0	<16.00	<0.0044
01/30/02	7095-98-0119	PS 274-Brooklyn	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/30/02	7097-18-0116	PS 44-Staten Island	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/30/02 PM 1200 to 2359

Data Validation Date: 02/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/30/02	TTW-00001	Location L	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00002	Location M-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00003	Location N	523	Air	<7.0	<0.005	0	0	<7.87	<0.0058
01/30/02	TTW-00004	Location J	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00005	Location Q	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00006	Location Q-Duplicate	497	Air	<7.0	<0.005	0	0	<7.87	<0.0061
01/30/02	TTW-00007	Location F	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00008	Location A	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00009	Location A-Duplicate	510	Air	<7.0	<0.005	0	0	<7.87	<0.0059
01/30/02	TTW-00010	Location B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00011	Location C	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00012	Location H	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00013	Location I	427	Air	<7.0	<0.006	0	0	<7.87	<0.0071
01/30/02	TTW-00014	Location D	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00015	Location K	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00016	Location T	711	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00017	Location U	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00018	Location V	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00019	Location S	506	Air	<7.0	<0.005	0	0	<7.87	<0.0060
01/30/02	TTW-00020	Location P	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00021	Location E	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	TTW-00022	Location W	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-30-02-PM.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/31/02 AM 0001 to 1200

Data Validation Date: 02/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
01/31/02	TTW-00023	Location L	687	Air	<7.0	<0.004	0	0	<8.75	<0.0049
01/31/02	TTW-00024	Location M-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00025	Location N	462	Air	<7.0	<0.006	0	0	<7.87	<0.0066
01/31/02	TTW-00026	Location J	665	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/31/02	TTW-00027	Location Q	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00028	Location F	387	Air	<7.0	<0.007	0	0	<7.87	<0.0078
01/31/02	TTW-00029	Location A	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00030	Location B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00031	Location B-Duplicate	666	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/31/02	TTW-00032	Location C	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00033	Location H	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00034	Location I	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00035	Location D	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00036	Location D-Duplicate	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00037	Location K	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00038	Location T	598	Air	<7.0	<0.005	0	0	<7.87	<0.0051
01/31/02	TTW-00039	Location U	707	Air	<7.0	<0.004	0	0	<8.75	<0.0048
01/31/02	TTW-00040	Location V	626	Air	<7.0	<0.004	0	0	<7.87	<0.0048
01/31/02	TTW-00041	Location S	683	Air	<7.0	<0.004	0	0	<8.75	<0.0049
01/31/02	TTW-00042	Location P	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00043	Location E	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	TTW-00044	Location W	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	FB01/31/02	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/31/02	TB01/31/02	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-01-31-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/30/02 0843 to 2329

Data Validation Date: 02/02002

					PCM by NIOSH 7400		TEM (AHERA)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm2	f/cc	Structures (#) 0.5µ - 5µ	5µ	S/mm2	S~f/cc**
01/30/02	LF02507	P-1	248	Air	<7.0	<0.011	0	0	<7.87	<0.0122
01/30/02	LF02508	P-2	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02509	P-3	720	Air	<7.0	<0.004	1	0	8.75	0.0047
01/30/02	LF02510	P-4	44	Air	<7.0	<0.061	0	0	<7.87	<0.0689
01/30/02	LF02511	P-5	NS							
01/30/02	LF02512	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02513	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02514	P-8	657	Air	<7.0	<0.004	0	0	<7.87	<0.0046
01/30/02	LF02515	W-11	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02516	W-12A	720	Air	7.64	0.004	2***	1***	26.25	0.0140
01/30/02	LF02517	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02518	B-13	NS							
01/30/02	LF02519	B-14	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/30/02	LF02520	T-15	720	Air	45.86	0.025	0	1****	8.75	0.0047
01/30/02	LF02521	T-16	720	Air	15.29	0.008	0	0	<8.75	<0.0047
01/30/02	LF02522	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02523	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02524	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02525	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/30/02	LF02526	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/30/02	LF02527	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Amosite

NA (1) - Not analyzed due to overloading of particulates
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n/a - Not applicable
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

FK-01-30-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 01/31/02 0830 to 2207

Data Validation Date: 02/02002

					PCM by NIOSH 7400		TEM (AHERA)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm2	f/cc	Structures (#) 0.5µ - 5µ	5µ	S/mm2	S~f/cc**
01/31/02	LF02528	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02529	P-2	516	Air	<7.0	<0.005	0	0	<7.87	<0/0059
01/31/02	LF02530	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02531	P-4	670	Air	<7.0	<0.004	0	0	<7.87	<0.0045
01/31/02	LF02532	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02533	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02534	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02535	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02536	W-11	720	Air	11.46	0.006	0	0	<8.75	<0.0047
01/31/02	LF02537	W-12A	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
01/31/02	LF02538	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02539	B-13	582	Air	<7.0	<0.005	0	0	<7.87	<0.0052
01/31/02	LF02540	B-14	720	Air	<7.0	<0.004	0	0	<8.57	<0.0047
01/31/02	LF02541	T-15	720	Air	15.29	0.008	0	0	<8.57	<0.0047
01/31/02	LF02542	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02543	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02544	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02545	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02546	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
01/31/02	LF02547	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
01/31/02	LF02548	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
R - Sample data rejected due to no sample volume
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

FK-01-31-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 02/01/02 0830 to 2230

Data Validation Date: 02/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm2	f/cc	Structures (#) 0.5µ - 5µ	5µ	S/mm2	S~f/cc**
02/01/02	LF02549	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02550	P-2	NS							
02/01/02	LF02551	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02552	P-4	720	Air	<7.0	<0.004	1	0	<8.75	<0.0047
02/01/02	LF02553	P-5	670	Air	<7.0	<0.004	0	0	<8.75	<0.0050
02/01/02	LF02554	P-6	714	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02555	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02556	P-8	570	Air	<7.0	<0.005	0	0	<7.87	<0.0053
02/01/02	LF02557	W-11	720	Air	15.29	0.008	0	0	NA(1)	NA(1)
02/01/02	LF02558	W-12A	720	Air	17.83	0.010	0	0	NA(1)	NA(1)
02/01/02	LF02559	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02560	B-13	720	Air	17.83	0.010	0	0	<8.75	<0.0047
02/01/02	LF02561	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02562	T-15	NS							
02/01/02	LF02563	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02564	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02565	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02566	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02567	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/01/02	LF02568	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/01/02	LF02569	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
R - Sample data rejected due to no sample volume
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

FK-02-01-02.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 01/31/02 PM 1200 to 2359

Data Validation Date: 02/03/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm2	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm2	TEM (AHERA) S~f/cc**
01/31/02	TTW-00045	Location L	710	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00046	Location M-1	552	Air	<7.0	<0.005	0	0	<8.00	<0.0056
01/31/02	TTW-00047	Location N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00048	Location J	719	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00049	Location Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00050	Location F	0	Air	<7.0	---	0	0	<8.00	---
01/31/02	TTW-00051	Location A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00052	Location B	720	Air	7.64	0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00053	Location H	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
01/31/02	TTW-00054	Location I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00055	Location D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00056	Location K	692	Air	<7.0	<0.004	0	0	<8.00	<0.0045
01/31/02	TTW-00057	Location T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00058	Location T-Duplicate	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00059	Location U	618	Air	<7.0	<0.004	0	0	<8.00	<0.0050
01/31/02	TTW-00060	Location V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00061	Location S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00062	Location P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
01/31/02	TTW-00063	Location E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00064	Location W	720	Air	8.28	0.004	0	0	<8.89	<0.0048

Notes: Locations C and V-duplicate were not submitted for analysis.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 02/02/02 AM 0001 to 1200

Data Validation Date: 02/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm2	f/cc	Structures (#) 0.5μ - 5μ	Structures (#) 5μ	S/mm2	S~f/cc**
02/02/02	TTW-00104	Location L	707	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/02/02	TTW-00105	Location M-1	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00106	Location N	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/02/02	TTW-00107	Location J	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00108	Location J-Duplicate	720	Air	<7.0	<0.004	0	1***	8.89	0.0048
02/02/02	TTW-00109	Location Q	307	Air	<7.0	<0.009	0	0	<8.00	<0.0100
02/02/02	TTW-00110	Location A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/02/02	TTW-00111	Location B	479	Air	<7.0	<0.006	0	0	<8.00	<0.0064
02/02/02	TTW-00112	Location C	720	Air	7.01	0.004	0	0	<8.89	<0.0048
02/02/02	TTW-00113	Location H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/02/02	TTW-00114	Location D	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/02/02	TTW-00115	Location K	718	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/02/02	TTW-00116	Location U	323	Air	<7.0	<0.008	0	0	<8.00	<0.0095
02/02/02	TTW-00117	Locatin V	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/02/02	TTW-00118	Location S	647	Air	<7.0	<0.004	0	0	<8.00	<0.0048
02/02/02	TTW-00119	Location S-Duplicate	704	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/02/02	TTW-00120	Location P	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00121	Location E	533.5	Air	<7.0	<0.005	0	0	<8.00	<0.0058
01/31/02	TTW-00122	Location W	708	Air	7.64	0.004	0	0	<8.00	<0.0044

Notes: Locations F and I were not submitted for analysis.

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

FL-02-02-02-AM.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 02/01/02 AM 0001 to 1200

Data Validation Date: 02/03/2002

					PCM by NIOSH 7400		TEM (AHERA)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm2	f/cc	Structures (#) 0.5μ - 5μ	Structures (#) 5μ	S/mm2	S~f/cc**
02/01/02	TTW-00065	Location L	0	Air	<7.0	n/a	0	0	<8.00	n/a
02/01/02	TTW-00066	Location M-1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00067	Location N	711	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00068	Location Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00069	Location F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00070	Location A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00071	Location B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00072	Location H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00073	Location I	627	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/01/02	TTW-00074	Location I-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00075	Location D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00076	Location K	720	Air	7.01	0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00077	Location T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00078	Location U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00079	Location V	714	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00080	Location S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00081	Location P	621	Air	<7.0	<0.004	0	0	<8.00	<0.0050
02/01/02	TTW-00082	Location E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	FB02/01/02	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/01/02	TB02/01/02	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Notes: Locations J, C, W and H-duplicate were not submitted for analysis..

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

FL-02-01-02-AM.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/22/02

Sample No.	WG7066-1			06251			06252			06253			06254			06255			06256		
Sampling Location	Method Blank			R- TAGA			Location A			Location 3A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			6180			5715			6255			6453			6391.13			6630		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0032	U		0.0035	U		0.0032	U		0.0031	U		0.0031	U		0.0030
12378-PeCDD	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
123478-HxCDD	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
123678-HxCDD	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
123789-HxCDD	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
1234678-HpCDD	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
OCDD	U		0.20	U		0.032	U		0.035	U		0.032	U		0.031	U		0.031	U		0.030
2378-TCDF	U		0.020	U		0.0032	U		0.0035	U		0.0032	U		0.0031	U		0.0031	U		0.0030
12378-PeCDF	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
23478-PeCDF	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
123478-HxCDF	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
123678-HxCDF	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
234678-HxCDF	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
123789-HxCDF	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
1234678-HpCDF	U		0.10	0.0008 J		0.016	U	0.0008	0.017	U		0.016	0.0010 J		0.015	U		0.016	U		0.015
1234789-HpCDF	U		0.10	U		0.016	U		0.017	U		0.016	U		0.015	U		0.016	U		0.015
OCDF	U		0.20	U		0.032	U		0.035	U		0.032	U		0.031	U		0.031	U		0.030
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			0.0008			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0401			0.0020			0.0026			0.0019			0.0021			0.0015			0.0017		

COC# 01/22/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 02/05/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

1-22-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/22/02

Sample No.	06257			06258			06259			06260			06261			06262		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			Location S			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7279			6888			7424			8195			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0029	U		0.0027	U		0.0032	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.015	U		0.013	U		0.016	U	0.0061	0.10	U		0.10
123478-HxCDD	U		0.014	U		0.015	U		0.013	U		0.016	U		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.015	U		0.013	U		0.016	U	0.0056	0.10	U		0.10
123789-HxCDD	U		0.014	U		0.015	U		0.013	U		0.016	U		0.10	U		0.10
1234678-HpCDD	U		0.014	U		0.015	U		0.013	U		0.016	U		0.10	0.0062 J		0.10
OCDD	U		0.027	U		0.029	U		0.027	U		0.032	U	0.0314	0.20	0.0156 J		0.20
2378-TCDF	U		0.0027	U		0.0029	U		0.0027	U		0.0032	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.015	U		0.013	U		0.016	U	0.0042	0.10	U		0.10
23478-PeCDF	U		0.014	U		0.015	U		0.013	U		0.016	0.0032 J		0.10	U		0.10
123478-HxCDF	U		0.014	U		0.015	U		0.013	U		0.016	0.0038 J		0.10	U		0.10
123678-HxCDF	U		0.014	U		0.015	U		0.013	U		0.016	U	0.0054	0.10	U		0.10
234678-HxCDF	U		0.014	U		0.015	U		0.013	U		0.016	0.0038 J		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.015	U		0.013	U		0.016	0.0068 J		0.10	U		0.10
1234678-HpCDF	U		0.014	U		0.015	U		0.013	U		0.016	U	0.0038	0.10	U		0.10
1234789-HpCDF	U		0.014	U		0.015	U		0.013	U		0.016	U	0.0039	0.10	U		0.10
OCDF	U		0.027	U		0.029	U		0.027	U		0.032	0.0093 J		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			0.0090			0.0062		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			0.0032			U		
Total HxCDFs	U			U			U			U			0.0142			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0031			0.0001		
TEQ (ND=1/2)	0.0015			0.0023			0.0014			0.0016			0.0270			0.0399		

COC# 01/22/02 dioxin

1-22-02dioair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/22/02

Sample No.	WG-7066-1P		wtc-06251		wtc-06252		wtc-06253		wtc-06254		wtc 06255		wtc-06256	
Sampling Location	Method Blank		R		A		3A		3A		B		C	
Sample Volume (L)	0		6180		5715		6255		6453		6391.13		6630	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of MoCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of DiCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of TrCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of TeCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of PeCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of HxCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of HpCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of OcCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Sum of NoCBs	U	10.0	U	1.62	U	1.75	U	1.60	U	1.55	U	1.56	U	1.51
Total	0		0		0		0		0		0		0	

COC# wtc-01/22/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 2/04/02

1-22-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/22/02

Sample No.	wtc-06257		wtc-06258		wtc-06259		wtc-06260		wtc-06261		wtc-06262	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	7279		6888		7424		6195		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of MoCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of DiCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of TrCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of TeCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of PeCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of HxCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of HpCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of OcCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Sum of NoCBs	U	1.37	U	1.45	U	1.35	U	1.61	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# wtc-01/22/02-Dioxin

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, February 8, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:00 p.m. on February 8

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 62 samples taken in and around ground zero from February1 through February 3. EPA also sampled for asbestos at two additional lower Manhattan locations on January 31 and February 1. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,729, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Public School 154 (333 East 135th St, Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on January 31 and February 1, and at Intermediate School 143 (511 W. 182nd St., Manhattan) on February 1. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Thrity-seven air samples collected on February 2 and February 3 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Dioxin - A total of 10 samples were collected on January 25 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, February 8, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 1, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

NYC / ER (Feb 2, 1200 - 2359 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
1 samples (Location N-duplicate) wase not collected due to an equipment malfunction.
1 location (Location T) was not sampled since access was not available.

NYC / ER (Feb 3, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.
Note: Low sample volumes reported.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 2, 0830 - 2400 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 3, 0830 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location B-13) was not analyzed due to overloading of particulates.

Ambient Air Sampling Locations

NYC / ER (Jan 25) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 31 - Feb 1) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)

- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 13 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
1 sample from Site 6 was not collected on Feb. 1 due to an equipment malfunction.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date: 02/01/02 1200 to 2400

Data Validation Date: 02/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
					f/mm2	f/cc	Structures (#)		S/mm2	S~f/cc**
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix			0.5μ - 5μ	5μ		
02/01/02	TTW-00083	Location L	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/01/02	TTW-00084	Location M-1	697	Air	<7.0	<0.004	0	0	<8.00	<0.0044
02/01/02	TTW-00085	Location M-1-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00086	Location N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00087	Location J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00088	Location J-Duplicate	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/01/02	TTW-00089	Location Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00090	Location F	389	Air	<7.0	<0.007	0	0	<8.00	<0.0079
02/01/02	TTW-00091	Location A	540	Air	7.01	0.005	0	0	<8.00	<0.0057
02/01/02	TTW-00092	Location B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00093	Location C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00094	Location H	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/01/02	TTW-00095	Location I	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/01/02	TTW-00096	Location D	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/01/02	TTW-00097	Location K	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/01/02	TTW-00098	Location U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00099	Location V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00100	Location S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/01/02	TTW-00101	Location P	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/01/02	TTW-00102	Location E	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/01/02	TTW-00103	Location W	720	Air	14.01	0.008	0	0	<8.00	<0.0043
02/01/02	FB	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/01/02	TB	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
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Zero sample volume collected

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

FL-02-01-02-PM.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 02/03/02 AM 001 to 1200

Data Validation Date: 02/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm2	f/cc	Structures (#) 0.5μ - 5μ	Structures (#) 5μ	S/mm2	S~f/cc**
02/03/02	TTW-00143	Location L	203.13	Air	<7.0	<0.013	0	0	<8.00	<0.0152
02/03/02	TTW-00144	Location M-1	530.25	Air	<7.0	<0.005	0	0	<8.00	<0.0058
02/03/02	TTW-00145	Location N	564.75	Air	<7.0	<0.005	0	0	<8.00	<0.0055
02/03/02	TTW-00146	Location J	385.88	Air	<7.0	<0.007	0	0	<8.00	<0.0080
02/03/02	TTW-00147	Location Q-Duplicate	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00148	Location Q	224.25	Air	<7.0	<0.012	0	0	<8.00	<0.0137
02/03/02	TTW-00149	Location F	616	Air	<7.0	<0.004	0	0	<8.00	<0.0050
02/03/02	TTW-00150	Location A	540	Air	8.92	0.006	0	0	<8.00	<0.0057
02/03/02	TTW-00151	Location B	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00152	Location C	436.5	Air	<7.0	<0.006	1***	0	8	0.0071
02/03/02	TTW-00153	Location H	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00154	Location I	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00155	Location D	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00156	Location K	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00157	Location U	408.75	Air	<7.0	<0.007	0	0	<8.00	<0.0075
02/03/02	TTW-00158	Location V	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00159	Location S	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00160	Location P	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/03/02	TTW-00161	Location P-Duplicate	497.25	Air	<7.0	<0.005	0	0	<8.00	<0.0062
02/03/02	TTW-00162	Location E	450	Air	<7.0	<0.006	0	0	<8.00	<0.0068
02/03/02	TTW-00163	Location W	540	Air	<7.0	<0.005	2***	0	16	0.0114

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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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N: South side of Pier 25 (next to volleyball ct)
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R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

FL-02-03-02-AM.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date: 02/02/02 PM 1200 to 2400

Data Validation Date: 02/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
					f/mm2	f/cc	Structures (#)		S/mm2	S~f/cc**
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix			0.5μ - 5μ	5μ		
02/02/02	TTW-00123	Location L	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00124	Location M-1	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00125	Location N	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00126	Location J	540	Air	<7.0	<0.005	2***	1***	24	0.0171
02/02/02	TTW-00127	Location Q	540	Air	<7.0	<0.005	1***	0	8	0.0057
02/02/02	TTW-00128	Location F	486	Air	<7.0	<0.006	1***	0	8	0.0063
02/02/02	TTW-00129	Location A	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00130	Location B	540	Air	8.28	0.006	1***	0	8	0.0057
02/02/02	TTW-00131	Location C	633	Air	7.64	0.005	0	0	<8.00	<0.0049
02/02/02	TTW-00132	Location H	450	Air	<7.0	<0.006	0	0	<8.00	<0.0068
02/02/02	TTW-00133	Location I	450	Air	<7.0	<0.006	0	0	<8.00	<0.0068
02/02/02	TTW-00134	Location D	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00135	Location K	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/02/02	TTW-00136	Location U	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00137	Location V	450	Air	<7.0	<0.006	0	0	<8.00	<0.0068
02/02/02	TTW-00138	Location S	462	Air	<7.0	<0.006	1***	0	8	0.0067
02/02/02	TTW-00139	Location S-Duplicate	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00140	Location P	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00141	Location E	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/02/02	TTW-00142	Location W	450	Air	10.19	0.009	0	0	<8.00	<0.0068
02/02/02	FB	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/02/02	TB	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Key:

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Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm2, volume 1200 L, for 25 mm filter (TEM)

FL-02-02-02-PM.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/25/02

Sample No.	WG7072-1			06301			06302			06303			06304			06305			06306		
Sampling Location	Method Blank			R- TAGA			A-Barclay & West Broadway			Location 3A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			6931			6479			5414			6448			6375			6206		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0029	U		0.0031	U		0.0037	U		0.0031	U		0.0031	U		0.0032
12378-PeCDD	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
123478-HxCDD	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
123678-HxCDD	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
123789-HxCDD	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
1234678-HpCDD	U	0.0057	0.10	U		0.014	U		0.015	U		0.018	U		0.016	0.0012 J		0.016	U		0.016
OCDD	U		0.20	U		0.029	U	0.0047	0.031	U		0.037	U		0.031	0.0059 J		0.031	U		0.032
2378-TCDF	U		0.020	U		0.0029	U		0.0031	U		0.0037	U		0.0031	U		0.0031	U		0.0032
12378-PeCDF	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
23478-PeCDF	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
123478-HxCDF	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
123678-HxCDF	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
234678-HxCDF	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
123789-HxCDF	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
1234678-HpCDF	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
1234789-HpCDF	U		0.10	U		0.014	U		0.015	U		0.018	U		0.016	U		0.016	U		0.016
OCDF	U		0.20	U		0.029	U		0.031	U		0.037	U		0.031	U		0.031	U		0.032
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			0.0020			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0408			0.0013			0.0015			0.0019			0.0017			0.0015			0.0014		

COC# 01/25/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 2/06/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

1-25-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/25/02

Sample No.	06307			06308			06309			06310			06311			06312		
Sampling Location	D Greenwich & Albany St.			P-Albany St. & South End			Location S			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	6380			6293			6684.5			6256			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0031	U		0.0032	U		0.0030	U		0.0032	U		0.020	U		0.020
12378-PeCDD	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
123478-HxCDD	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
123678-HxCDD	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
123789-HxCDD	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
1234678-HpCDD	0.0015 J		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
OCDD	U		0.031	U		0.032	U		0.030	U		0.032	U		0.20	U		0.20
2378-TCDF	U		0.0031	U		0.0032	U		0.0030	U		0.0032	U		0.020	U		0.020
12378-PeCDF	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
23478-PeCDF	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
123478-HxCDF	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
123678-HxCDF	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
234678-HxCDF	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
123789-HxCDF	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
1234678-HpCDF	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
1234789-HpCDF	U		0.016	U		0.016	U		0.015	U		0.016	U		0.10	U		0.10
OCDF	U		0.031	U		0.032	U		0.030	U		0.032	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	0.0015			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0015			0.0014			0.0012			0.0016			0.0409			0.0401		

COC# 01/25/02 dioxin

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 02/02/02 0830 to 2400

Data Validation Date: 02/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/02/02	LF02570	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02571	P-2	664	Air	<7.0	<0.004	0	0	<7.87	<0.0046
02/02/02	LF02572	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02573	P-4	663	Air	<7.0	<0.004	1	0	<8.75	<0.0051
02/02/02	LF02574	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02575	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02576	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02577	P-8	720	Air	<7.0	<0.005	0	0	<8.75	<0.0047
02/02/02	LF02578	W-11	720	Air	12.74	0.007	0	0	<8.75	<0.0047
02/02/02	LF02579	W-12A	720	Air	34.39	0.018	0	0	<8.75	<0.0047
02/02/02	LF02580	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02581	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02582	B-14	720	Air	25.48	0.014	0	0	<8.75	<0.0047
02/02/02	LF02583	T-15	720	Air	23.57	0.013	0	0	<8.75	<0.0047
02/02/02	LF02584	T-16	720	Air	15.29	0.008	0	0	<8.75	<0.0047
02/02/02	LF02585	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02586	O-18	691	Air	<7.0	<0.004	0	0	<8.75	<0.0049
02/02/02	LF02587	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/02/02	LF02588	MPHS-20	720	Air	10.19	0.005	0	0	<8.75	<0.0047
02/02/02	LF02589	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/02/02	LF02590	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
R - Sample data rejected due to no sample volume
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-02-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 02/03/02 0830 to 2400

Data Validation Date: 02/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/03/02	LF02591	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02592	P-2	682	Air	<7.0	<0.004	1***	0	8.75	0.0049
02/03/02	LF02593	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02594	P-4	720	Air	<7.0	<0.004	1	0	<8.75	<0.0047
02/03/02	LF02595	P-5	717	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02596	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02597	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02598	P-8	569	Air	<7.0	<0.005	0	0	<7.87	<0.0053
02/03/02	LF02599	W-11	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02600	W-12A	720	Air	21.66	0.012	0	0	<8.75	<0.0047
02/03/02	LF02601	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02602	B-13	720	Air	<7.0	<0.004	NA(1)	NA(1)	NA(1)	NA(1)
02/03/02	LF02603	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02604	T-15	720	Air	10.19	0.005	0	0	<8.75	<0.0047
02/03/02	LF02605	T-16	720	Air	11.46	0.006	0	0	<8.75	<0.0047
02/03/02	LF02606	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02607	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02608	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02609	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/03/02	LF02610	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/03/02	LF02611	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-02-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 02/01/02 1200 to 2400

Data Validation Date: 02/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
02/01/02	7093-18-0127	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/01/02	7093-19-0127	Chambers Street	1242	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/01/02	7093-15-125	IS 143 Manhattan	NS							
02/01/02	7094-09-0115	PS 154-Bronx	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/01/02	7095-98-0121	PS 274-Brooklyn	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/01/02	7096-12-0121	PS 199-Queens	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/01/02	7097-18-0117	PS 44-Staten Island	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 01/31/02 1200-2400

Data Validation Date: 02/05/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
01/31/02	7093-18-0126	Park Row	1170	Air	<7.0	<0.002	0	0	<13.33	<0.0044
01/31/02	7093-19-0126	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
01/31/02	7093-15-0124	PS 143-Manhattan	692	Air	<7.0	<0.004	0	0	<8.89	<0.0049
01/31/02	7094-09-0114	PS 154-Bronx	946	Air	<7.0	<0.003	0	0	<11.43	<0.0047
01/31/02	7096-12-0120	PS 199-Queens	1328	Air	<7.0	<0.002	0	0	<16.00	<0.0046
01/31/02	7095-98-0120	PS 274-Brooklyn	460	Air	<7.0	<0.006	0	0	<8.00	<0.0067
01/31/02	7097-18-0117	PS 44-Staten Island	1014	Air	<7.0	<0.003	0	0	<11.43	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-01-31-02.xls

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday-Monday, February 9-11, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 9:30 a.m. on February 12

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 21 samples taken in and around ground zero on February 4. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,750, with 31 samples above the standard (27 of these were collected prior to September 30, the other four were collected on October 9, November 27, December 27 and January 14).

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 6, and from February 8 through February 10 at Location N (south side of Pier 25), Location R (northwest side of Stuyvesant High School) and Location L (northeast side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Dioxin - A total of 10 samples were collected on January 29 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

VOCs - Sampling for volatile organic compounds (VOCs) was conducted from February 7 through February 10 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from February 7 through February 10 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

VOC's - Samples taken on February 9, directly in a plume of smoke emanating from a 4-inch subsurface pipe in Basement Level #3 of the Austin Tobin Parking Garage, showed very high levels of numerous VOC's. Actions were taken by the fire department to reduce the smoke, which is no longer being emitted from this pipe, however follow-up work to trace the pipe continues.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, February 11, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 3, 1200 - 2359 hrs)

Results pending.

NYC / ER (Feb 4, 0001 - 1200 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

Ambient Air Sampling Locations

NYC / ER (Jan 29) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Feb 6) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 26.50 ug/m^3 with a maximum reading of 735.72 ug/m^3.
Station N had an average 25.79 ug/m^3 with a maximum reading of 734.76 ug/m^3.
Station R had an average 24.67 ug/m^3 with a maximum reading of 573.18 ug/m^3.
Note: Minimum readings are no longer being measured.

NYC / ER (Feb 7) - Particulate Monitoring (Dataram)

Particulate monitoring at Stations L, N, and R was not conducted due to the weather conditions.

NYC / ER (Feb 8) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated 8 hours.
Station L had an average of 26.83 ug/m^3 with a maximum reading of 383.3 ug/m^3.
Station N had an average 26.14 ug/m^3 with a maximum reading of 210.27 ug/m^3.
Station R had an average 26.58 ug/m^3 with a maximum reading of 247.03 ug/m^3.

NYC / ER (Feb 9) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 23.56 ug/m^3 with a maximum reading of 60.66 ug/m^3.
Station N had an average 20.92 ug/m^3 with a maximum reading of 52.81 ug/m^3.
Station R had an average 20.49 ug/m^3 with a maximum reading of 103.14 ug/m^3.

NYC / ER (Feb 10) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 31.95 ug/m^3 with a maximum reading of 108.68 ug/m^3.
Station N had an average 41.10 ug/m^3 with a maximum reading of 369.16 ug/m^3.
Station R had an average 33.01 ug/m^3 with a maximum reading of 77.83 ug/m^3.

NYC / ER (Feb 7) - Volatile Organics (Mobile Laboratory)

Numerous compounds were identified above the detection limit (20 ppbv) at the South Tower in a ground level plume sample.
VOCs were not detected in any of the three other samples collected (Washing Tent, Austin Tobin Plaza, and North Tower).

NYC / ER (Feb 8) - Volatile Organics (Mobile Laboratory)

Numerous compounds were identified above the detection limit (20 ppbv) at the South Tower in a ground level plume sample.
VOCs were not detected in any of the three other samples collected (Washing Tent, Austin Tobin Plaza, and North Tower).

NYC / ER (Feb 9) - Volatile Organics (Mobile Laboratory)

Black smoke from an unknown source identified from a 4-inch subsurface pipe at the B-3 level of the Austin Tobin garage.
Extremely elevated levels of VOCs identified at the end of the pipe.
Breathing level sample at the Austion Tobin Plaza location did not detect any VOCs.
Actions taken by fire department to reduce smoke.
Smoke is reportedly no longer being emitted from this pipe, however followup work to trace the pipe towards Vescey St. continues.
Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, and South Tower), including in the debris area at ground level.
VOCs were not detected in two of the samples collected (Washing Tent, Austin Tobin Plaza).

NYC / ER (Feb 10) - Volatile Organics (Mobile Laboratory)

Numerous compounds were identified above the detection limit (20 ppbv) at the South Tower in a ground level plume sample.
Aside from one compound, VOCs were not detected in any of the three other samples collected (Washing Tent, Austin Tobin Plaza, and North Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 02/04/02 0001 to 1200

Data Validation Date: 02/05/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/04/02	TTW-00185	L	676	Air	<7.0	<0.004	0	0	<8.00	<0.0046
02/04/02	TTW-00186	M1	472.5	Air	<7.0	<0.006	0	0	<8.00	<0.0065
02/04/02	TTW-00187	N	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00188	J	720	Air	<7.0	<0.004	0	0	<11.43	<0.0061
02/04/02	TTW-00189	Q	720	Air	12.10	0.006	0	0	<11.43	<0.0061
02/04/02	TTW-00190	F	464.25	Air	<7.0	<0.006	0	0	<8.00	<0.0066
02/04/02	TTW-00191	F-duplicate	540	Air	8.28	0.006	0	0	<8.00	<0.0057
02/04/02	TTW-00192	A	524.25	Air	7.01	0.005	0	0	<8.00	<0.0059
02/04/02	TTW-00193	B	640	Air	7.64	0.005	***1	0	8	0.0048
02/04/02	TTW-00194	C	720	Air	10.83	0.006	***4	0	35.56	0.0190
02/04/02	TTW-00195	H	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00196	H-Duplicate	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00197	I	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00198	D	720	Air	<7.0	<0.004	***1	0	8.89	0.0048
02/04/02	TTW-00199	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/04/02	TTW-00200	U	420	Air	<7.0	<0.006	0	0	<8.00	<0.0073
02/04/02	TTW-00201	V	540	Air	7.64	0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00202	S	677	Air	<7.0	<0.004	0	0	<8.00	<0.0045
02/04/02	TTW-00203	P	629.13	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/04/02	TTW-00204	E	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00205	W	441	Air	8.28	0.007	0	0	<8.00	<0.0070

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-04-02-AM.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/29/02

Sample No.	WG7078-1			06351			06352			06353			06354			06355			06356		
Sampling Location	Method Blank			R- TAGA			A-Barclay & West Broadway			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.		
Volume (Liters)	0			6045			7096.5			7500			7308			5850			5945		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0033	U		0.0028	U		0.0027	U		0.0027	U		0.0034	U		0.0034
12378-PeCDD	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
123478-HxCDD	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
123678-HxCDD	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
123789-HxCDD	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
1234678-HpCDD	U		0.10	0.0021 J		0.017	U	0.0008	0.014	U		0.013	U	0.0010	0.014	U		0.017	U		0.017
OCDD	U	0.0230	0.20	U		0.033	0.0049 J		0.028	0.0026 J		0.027	U	0.0020	0.027	U		0.034	U		0.034
2378-TCDF	U		0.020	U		0.0033	U		0.0028	U		0.0027	U		0.0027	U		0.0034	U		0.0034
12378-PeCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
23478-PeCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
123478-HxCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
123678-HxCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
234678-HxCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
123789-HxCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
1234678-HpCDF	U		0.10	U		0.017	U	0.0013	0.014	U		0.013	U		0.014	U		0.017	U		0.017
1234789-HpCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.017	U		0.017
OCDF	U		0.20	U		0.033	U		0.028	U		0.027	U		0.027	U		0.034	U		0.034
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	U			0.0021			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0424			0.0022			0.0022			0.0018			0.0021			0.0024			0.0021		

COC# 01/29/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 2/07/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

1-29-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/29/02

Sample No.	06357			06358			06359			06360			06361			06362		
Sampling Location	Location S			P-Albany St. & South End			E-Liberty St. & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	7365			6322			5421			6177			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0032	U		0.0037	U		0.0033	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
123478-HxCDD	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
123789-HxCDD	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
1234678-HpCDD	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
OCDD	U		0.027	U		0.032	U		0.037	U		0.033	U		0.20	U		0.20
2378-TCDF	U		0.0027	U		0.0032	U		0.0037	U		0.0033	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
123478-HxCDF	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
123678-HxCDF	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
234678-HxCDF	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
1234678-HpCDF	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
1234789-HpCDF	U		0.014	U		0.016	U		0.018	U		0.016	U		0.10	U		0.10
OCDF	U		0.027	U		0.032	U		0.037	U		0.033	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0015			0.0022			0.0024			0.0019			0.0416			0.0410		

COC# 01/29/02 dioxin

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United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 10, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0641	0644	0639
Stop Time	1449	1453	1446
Run Time (minutes)	488	489	487
Maximum Concentration (ug/m^3)	108.68	369.16	77.83
Average Concentration (ug/m^3)	31.95	41.10	33.01

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 8, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0644	0646	0641
Stop Time	1444	1446	1441
Run Time (minutes)	480	480	480
Maximum Concentration (ug/m^3)	383.3	210.27	247.03
Average Concentration (ug/m^3)	26.83	26.14	26.58

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 9, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0701	0704	0658
Stop Time	1456	1500	1453
Run Time (minutes)	475	476	471
Maximum Concentration (ug/m^3)	60.66	52.81	103.14
Average Concentration (ug/m^3)	23.56	20.92	20.49

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 6, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0643	0643	0643
Stop Time	1440	1440	1440
Run Time (minutes)	477	477	477
Maximum Concentration (ug/m^3)	735.72	734.76	573.18
Average Concentration (ug/m^3)	26.50	25.79	24.67

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/10/02

File Name	NYC1014	NYC1015	NYC1016	NYC1017	NYC1020	NYC1018
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			Plume
Sample Number			A07453	A07454	A07456	A07455
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	**160**
Chlorodifluoromethane	RL	RL	RL	RL	RL	**410**
Dichlorodifluoromethane	RL	RL	RL	RL	RL	**340**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	**220**
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	**180**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	**24**
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**280**
MTBE	RL	RL	RL	**24**	RL	**3100**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	**140**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	**240**
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	**42**
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	**78**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	**140**
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	**55**
o-Xylene	RL	RL	RL	RL	RL	**33**
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	**21**
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	**31**
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/08/02

File Name	NYC990	NYC991	NYC992	NYC993	NYC996	NYC994
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			Plume
Sample Number			A07445	A07446	A07448	A07447
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	**83**
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	**130**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	**75**
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	**95**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**160**
MTBE	RL	RL	RL	RL	RL	**1100**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	**54**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	**100**
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	**33**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	**57**
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	**30**
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/09/02

File Name	NYC999	NYC1000	NYC1001	NYC1002	NYC1005	NYC1003
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	Austin Tobin Plaza Parking Garage 4" Pipe	South Tower Plume
Sample Number			A07449	A07450	A07451	A07452
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	20 mL	250 mL
Reporting Limit (RL)	20	20	20	20	250	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	**990000**	**120**
Chlorodifluoromethane	RL	RL	RL	RL	RL	**60**
Dichlorodifluoromethane	RL	RL	RL	RL	RL	**220**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	**15000**	RL
Vinyl Chloride	RL	RL	RL	RL	**11000**	RL
1,3-Butadiene	RL	RL	RL	RL	**400000**	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	**2300**	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	**130**
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**21000**	**120**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**200**
MTBE	RL	RL	RL	RL	RL	**1200**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	**80**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	**2800**	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	**150**
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	**610000**	RL
Heptane	RL	RL	RL	RL	**3700**	**24**
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	**290**	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	**45000**	**42**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	**71**
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	**4800**	RL
Ethylbenzene	RL	RL	RL	RL	**4700**	RL
m&p-Xylenes	RL	RL	RL	RL	**4000**	**36**
0-Xylene	RL	RL	RL	RL	**4300**	**23**
Styrene	RL	RL	RL	RL	**17000**	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	**1600**	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	**1300**	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	**880**	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/07/02

File Name	NYC981	NYC982	NYC983	NYC984	NYC986	NYC985
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			Plume
Sample Number			A07441	A07442	A07443	A07444
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	**54**
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	**58**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	**46**
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	**63**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**88**
MTBE	RL	RL	RL	RL	RL	**580**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	**39**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	**52**
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	**24**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	**42**
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, February 12, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:30 p.m. on February 12

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 71 samples taken in and around ground zero from February 3 through February 5. EPA also sampled for asbestos at two additional lower Manhattan locations from February 2 through February 4. All but one sample showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. One sample, taken on February 5 at Location C (Trinity & Liberty Streets) showed 88 structures per square millimeter. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,827, with 32 samples above the standard (27 of these were collected prior to September 30, the other five were collected on October 9, November 27, December 27, January 14 and February 5).

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) from February 2 through February 4. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Thirty-four air samples collected on February 4 and February 5 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 11 at Location R (northwest side of Stuyvesant High School) and Location L (northeast side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible

exposure limit for particulates.

Dioxin - A total of 6 samples were collected from January 21 through January 28 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 11 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 11 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, February 12, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 3, 1200 - 2359 hrs)

All 21 samples analyzed were below the TEM AHERA standard.
1 location (Location T) was not sampled since access was not available.

NYC / ER (Feb 4, 1200 - 2359 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Location L and Q) were not collected/analyzed due to equipment malfunctions.
1 sample (Location M1) was not collected.
Note: Low sample volume recorded.
Note: Locations H, I, and P are no longer being monitored.

NYC / ER (Feb 5, 0001 - 1200 hrs)

1 of 16 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location C (88 S/mm^2).
2 samples (Locations F and D) were not collected due to equipment malfunctions.
1 sample (Location M1) was not collected.
Note: Low sample volume recorded.

NYC / ER (Feb 5, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location M1) was not collected.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 4, 0743 - 2200 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
4 samples (Locations W-11, B-14, T-16, and MPHS-20) were not analyzed due to overloading of particulates.

Fresh Kills (Feb 5, 0743 - 2200 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume recorded.

Ambient Air Sampling Locations

NYC / ER (Jan 21 - Jan 28) - Dioxin (EPA-ORD)

Six (6) 72-hour samples were collected during this period at Park Row (2 samples), Chambers St./West St. (2 samples), and Albany St. (2 samples) at roof top locations. None of the samples collected were above the EPA Removal Action guidelines (based on a 30-year exposure).
Note: The analytical results for all but one of these samples (Park Row during the period January 21-24) indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.
Data is not attached.

NYC / ER (Feb 2 - 4) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 21 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
Resubmittal: Corrected spreadsheet for Feb. 1 attached. No changes in results.

NYC / ER (Feb 11) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and R) were below the OSHA TWA.
Equipment malfunction at Station N.
Instruments operated approximately 8 hours.
Station L had an average of 7.42 ug/m^3 with a maximum reading of 80.51 ug/m^3.
Station R had an average 8.17 ug/m^3 with a maximum reading of 45.52 ug/m^3.

NYC / ER (Feb 11) - Volatile Organics (Mobile Laboratory)

Aside from two compounds detected from a ground level plume sample at the South Tower, volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 02/03/02 1200 to 2359

Data Validation Date: 02/05/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/03/02	TTW-00164	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/03/02	TTW-00165	M1	720	Air	14.01	0.007	0	0	<8.89	<0.0048
02/03/02	TTW-00166	N	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/03/02	TTW-00167	J	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/03/02	TTW-00168	Q	540	Air	12.74	0.009	0	0	<8.00	<0.0057
02/03/02	TTW-00169	F	540	Air	8.28	0.006	0	0	<8.00	<0.0057
02/03/02	TTW-00170	A	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00171	B	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00172	B- Duplicate	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00173	C	540	Air	29.30	0.021	0	0	<8.00	<0.0057
02/03/02	TTW-00174	H	301.5	Air	10.19	0.013	0	0	<8.00	<0.0102
02/03/02	TTW-00175	I	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00176	I-Duplicate	468.75	Air	<7.0	<0.006	0	0	<8.00	<0.0066
02/03/02	TTW-00177	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/03/02	TTW-00178	K	540	Air	<7.0	<0.005	***1	0	8	0.0057
02/03/02	TTW-00179	U	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/03/02	TTW-00180	V	720	Air	9.55	0.005	0	0	<8.89	<0.0048
02/03/02	TTW-00181	S	611	Air	<7.0	<0.004	0	0	<8.00	<0.0050
02/03/02	TTW-00182	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/03/02	TTW-00183	E	720	Air	11.46	0.006	0	0	<8.89	<0.0048
02/03/02	TTW-00184	W	521.5	Air	17.83	0.013	0	0	<8.89	<0.0066

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E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-03-02-pmrev1.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 02/04/02 1200 to 2359

Data Validation Date: 02/06/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/04/02	TTW-00206	L -Dup	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00207	N	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00208	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/04/02	TTW-00209	Q	30	Air	<7.0	<0.090	0	0	NA(2)	NA(2)
02/04/02	TTW-00210	F	450	Air	<7.0	<0.006	0	0	<8.00	<0.0068
02/04/02	TTW-00211	A	578	Air	<7.0	<0.005	0	0	<8.00	<0.0053
02/04/02	TTW-00212	B	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00213	C	450	Air	<7.0	<0.006	***3	0	24	0.0205
02/04/02	TTW-00214	C- Dup	540	Air	<7.0	<0.005	***1	***1	16	0.0114
02/04/02	TTW-00215	D	540	Air	<7.0	<0.005	0	***1	8	0.0057
02/04/02	TTW-00216	K	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00217	T	448.88	Air	<7.0	<0.006	0	0	<8.00	<0.0069
02/04/02	TTW-00218	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/04/02	TTW-00219	V	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/04/02	TTW-00220	S	708	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/04/02	TTW-00221	E	515.25	Air	<7.0	<0.005	0	0	<8.00	<0.0060
02/04/02	TTW-00222	W	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049

Sample L- Pump Fault - No Sample Submitted
Sample Q - Sample Volume too low - Not analyzed for TEM as per Chain of Custody

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E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-04-02-pmrev1.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 02/05/02 0001 to 1200

Data Validation Date: 02/07/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/05/02	Field Blank	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/05/02	Trip Blank	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/05/02	TTW-00224	L	654	Air	<7.0	<0.004	0	0	<8.00	<0.0047
02/05/02	TTW-00225	N	401.25	Air	<7.0	<0.007	0	0	<8.00	<0.0077
02/05/02	TTW-00226	N-Dup	509.25	Air	<7.0	<0.005	0	0	<8.00	<0.0060
02/05/02	TTW-00227	J	630	Air	8.28	0.005	***3	0	24	0.0147
02/05/02	TTW-00228	Q	568.75	Air	<7.0	<0.005	0	0	<8.00	<0.0054
02/05/02	TTW-00229	A	528	Air	<7.0	<0.005	0	0	<8.00	<0.0058
02/05/02	TTW-00230	B	540	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/05/02	TTW-00231	C	513.75	Air	<7.0	<0.005	***10	***1	88	0.0659
02/05/02	TTW-00232	D-Dup	402.5	Air	<7.0	<0.007	0	***1	8	0.0077
02/05/02	TTW-00233	K	493.5	Air	<7.0	<0.005	0	0	<8.00	<0.0062
02/05/02	TTW-00234	T	182.25	Air	<7.0	<0.015	0	0	<8.00	<0.0169
02/05/02	TTW-00235	U	630	Air	<7.0	<0.004	0	0	<8.00	<0.0049
02/05/02	TTW-00236	V	630	Air	<7.0	<0.004	***1	***1	16	0.0098
02/05/02	TTW-00237	S	535.5	Air	<7.0	<0.005	0	0	<8.00	<0.0058
02/05/02	TTW-00238	E	540	Air	7.01	0.005	0	0	<8.00	<0.0057
02/05/02	TTW-00239	W	630	Air	<7.0	<0.004	***4	0	32	0.0196

Location F - No sample - Pump Fault
Location D - No sample - Pump Fault

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-05-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/07/02**
Sampling Date and Time: **2/5/02 1200 to 2359**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/05/02	TTW-00240	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00241	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00242	J	680	Air	<7.0	<0.004	***3	0	24	0.0136
02/05/02	TTW-00243	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00244	F	720	Air	7.01	0.004	0	*****1	8.89	0.0048
02/05/02	TTW-00245	A	707	Air	<7.0	<0.004	***4	***1	44.44	0.0242
02/05/02	TTW-00246	B	720	Air	7.64	0.004	***3	***1	35.56	0.0190
02/05/02	TTW-00247	B-Dup	720	Air	<7.0	<0.004	***1	***1	17.78	0.0095
02/05/02	TTW-00248	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00249	D	720	Air	<7.0	<0.004	***1	0	8.89	0.0048
02/05/02	TTW-00250	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00251	T	705	Air	<7.0	<0.004	0	0	<8.89	<0.0049
02/05/02	TTW-00252	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00253	V	683	Air	<7.0	<0.004	0	0	<8.00	<0.0045
02/05/02	TTW-00254	V-Dup	715	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00255	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00256	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/05/02	TTW-00257	W	720	Air	<7.0	<0.004	***1	***1	17.78	0.0095

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U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-02-05-02-pm.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 02/04/2002 0743 to 2200

Data Validation Date: 02/06/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/04/02	LFO02612	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02613	P-2	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02614	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02615	P-4	668	Air	<7.0	<0.004	0	0	<8.75	<0.0050
02/04/02	LFO02616	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02617	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02618	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02619	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02620	W-11	720	Air	33.12	0.018	NA (1)	NA (1)	NA (1)	NA (1)
02/04/02	LFO02621	W-12A	720	Air	22.93	0.012	***1	***3	35	0.0187
02/04/02	LFO02622	W-12B	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02623	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02624	B-14	720	Air	<7.0	<0.004	NA (1)	NA (1)	NA (1)	NA (1)
02/04/02	LFO02625	T-15	720	Air	12.74	0.007	0	0	<8.75	<0.0047
02/04/02	LFO02626	T-16	720	Air	8.92	0.005	NA (1)	NA (1)	NA (1)	NA (1)
02/04/02	LFO02627	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02628	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02629	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/04/02	LFO02630	MPHS-20	720	Air	<7.0	<0.004	NA (1)	NA (1)	NA (1)	NA (1)
02/04/02	LFO02631	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/04/02	LFO02632	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-04-02rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/5/02 0743 to 2200

Data Validation Date: 02/08/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/05/02	LF02633	P-1	702	Air	26.75	0.015	***3	0	26.25	0.0144
02/05/02	LF02634	P-2	647	Air	<7.0	<0.004	0	***1	7.87	0.0047
02/05/02	LF02635	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/05/02	LF02636	P-4	698	Air	<7.0	<0.004	0	0	<8.75	<0.0048
02/05/02	LF02637	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/05/02	LF02638	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/05/02	LF02639	P-7	684	Air	<7.0	<0.004	0	0	<8.75	<0.0049
02/05/02	LF02640	P-8	649	Air	24.20	0.014	***2	***1	23.62	0.0140
02/05/02	LF02641	W-11	720	Air	52.23	0.028	***7	0	61.24	0.0327
02/05/02	LF02642	W-12A	714	Air	10.19	0.006	***4	0	35	0.0189
02/05/02	LF02643	W-12B	720	Air	7.64	0.004	***1	0	8.75	0.0047
02/05/02	LF02644	B-13	720	Air	15.29	0.008	***1	0	8.75	0.0047
02/05/02	LF02645	B-14	720	Air	12.10	0.007	***1	***2	26.25	0.0140
02/05/02	LF02646	T-15	720	Air	11.46	0.006	0	0	<8.75	<0.0047
02/05/02	LF02647	T-16	720	Air	8.92	0.005	0	0	<8.75	<0.0047
02/05/02	LF02648	O-17	694	Air	<7.0	<0.004	0	0	<7.87	<0.0047
02/05/02	LF02649	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/05/02	LF02650	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
02/05/02	LF02651	MPHS-20	89	Air	<7.0	<0.030	***2	0	15.75	0.0681
02/05/02	LF02652	Lot Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/05/02	LF02653	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-05-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 02/01/02 1200 to 2400

Data Validation Date: 02/05/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc*
02/01/02	7093-18-0127	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/01/02	7093-19-0127	Chambers Street	1242	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/01/02	7093-15-125	IS 143 Manhattan	NS							
02/01/02	7094-09-0115	PS 154-Bronx	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/01/02	7095-98-0121	PS 274-Brooklyn	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/01/02	7096-12-0121	PS 199-Queens	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/01/02	7097-18-0118	PS 44-Staten Island	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 02/02/02 1200 to 2400

Data Validation Date: 02/05/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc*
02/02/02	7093-15-0126	PS 143-Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/02/02	7093-18-0128	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/02/02	7093-19-0128	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/02/02	7094-09-0116	PS 154-Bronx	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/02/02	7095-98-0122	PS 274-Brooklyn	1390	Air	<7.0	<0.002	0	0	<16.00	<0.0044
02/02/02	7096-12-0122	PS 199-Queens	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/02/02	7097-18-0119	PS 44-Staten Island	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 02/03/02 1200 to 2400

Data Validation Date: 02/06/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/03/02	7093-18-0129	Park Row	1286	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/03/02	7093-19-0129	Chambers Street	1374	Air	7.01	0.002	0	0	<16.00	<0.0045
02/03/02	7093-15-0127	I.S. 143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/03/02	7094-09-0117	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/03/02	7096-12-0123	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/03/02	7095-98-0123	P.S. 274(Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/03/02	7097-18-0120	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/08/02**
Sampling Date and Time: **2/4/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/04/02	7093-18-0130	Park Row	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/04/02	7093-19-0130	Chambers Street	1238	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/04/02	7093-15-0128	I.S. 143	1152	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/04/02	7094-09-0118	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/04/02	7096-12-0124	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/04/02	7095-98-0124	P.S. 274(Brooklyn)	1214	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/04/02	7097-18-0121	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 11, 2002

Location	L	N*	R
DataRAM I.D. No.	D080	-	D074
Flow Rate (liters/minute)	2.0	-	2.0
Start Time	0638	-	0636
Stop Time	1438	-	1436
Run Time (minutes)	480	-	480
Maximum Concentration (ug/m^3)	80.51	-	45.52
Average Concentration (ug/m^3)	7.42	-	8.17

* equipment malfunction

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/11/02

File Name	NYC1023	NYC1024	NYC1025	NYC1026	NYC1028	NYC1027
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			Plume
Sample Number			A07457	A07458	A07460	A07459
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	38
Acetone	RL	RL	RL	RL	RL	40
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, February 13, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 10:15 a.m. on February 14

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 53 samples taken in and around ground zero on February 6 and February 7. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,880, with 16 samples above the standard (11 of these were collected prior to September 30, the other five were collected on October 9, November 27, December 27, January 14 and February 5).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Staten Island Landfill:

Air (Asbestos) - Thirty-eight air samples collected on February 6 and February 7 were analyzed for asbestos. Samples taken at one of the Wash Tents (Location W-11), showed 110.2 structures per square millimeter on February 6, and 170.6 structures per square millimeter on February 7, both of which exceed the AHERA school re-entry standard. In addition, a sample taken on February 7 at the Mess Tent (Location T-15) was just above OSHA's permissible exposure limit (PEL) of 0.1 fibers per cubic centimeter. All other samples were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on February 8, 9 and 11 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from February 2 through February 8 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from February 2 through February 8 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Particulate Monitoring - EPA used portable monitors to collect samples on February 12 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 12 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

A sample taken at Austin Tobin Plaza on February 12 exceeded the OSHA PEL for both benzene and 1,3-butadiene. Note that this sample was collected in the vicinity of a burning acetylene cylinder.

All samples taken on February 12 at EPA's Wash Tent (West & Murray Streets), the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, February 13, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 6, 0001 - 1200 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
1 sample (Location J) was not collected due to equipment malfunctions.
2 locations (Location U and U-duplicate) were not sampled due to restricted access to the area.
1 sample (Location M1) was not collected.

NYC / ER (Feb 6, 1200 - 2359 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations A and F) were not collected due to equipment malfunctions.
Note: Location T is no longer being monitored.

NYC / ER (Feb 7, 0001 - 1200 hrs)

All 9 samples analyzed were below the TEM AHERA standard.
7 samples (Locations J, J-duplicate, F, A, B, E, and W) were not collected due to equipment malfunctions.
1 sample (Location S) was not submitted due to tampered equipment.
1 location (Location U) was not sampled due to restricted access to the area.

NYC / ER (Feb 7, 1200 - 2359 hrs)

All 13 samples analyzed were below the TEM AHERA standard.
4 samples (Locations B, S, E-duplicate, and K) were not collected due to equipment malfunctions.
1 sample (Location U) was not submitted due to tampered equipment.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 6, 0743 - 2200 hrs)

1 of 19 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location W-11 (110.24 S/mm^2).
Note: Low sample volume recorded.

Fresh Kills (Feb 7, 0743 - 2200 hrs)

1 of 19 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location W-11 (170.6 S/mm^2).
Note: Elevated PCM readings (just above OSHA PEL of 0.1 f/cc) at Location T-15.
Note: Low sample volume recorded.

Fresh Kills (Feb 8) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Feb 9) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Feb 11) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Feb 2) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***5.20 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***7.58 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.14 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 2) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***24.12 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 3) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***8.41 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.45 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***9.07 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 3) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***14.90 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 4) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.77 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***13.24 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***14.24 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 4) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***33.37 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 5) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***8.67 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***8.25 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***8.77 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 5) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***31.64 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 6) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***14.76 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***14.26 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***15.01 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 6) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***31.66 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 7) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***20.79 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***22.75 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***23.58 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 7) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***35.66 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 8) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***13.18 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***14.03 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***14.60 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 8) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***32.46 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 12) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 27.91 ug/m³ with a maximum reading of 152.95 ug/m³.
Station N had an average 13.38 ug/m³ with a maximum reading of 78.39 ug/m³.
Station R had an average 16.00 ug/m³ with a maximum reading of 71.03 ug/m³.

NYC / ER (Feb 12) - Volatile Organics (Mobile Laboratory)

Benzene exceeded OSHA TWA PEL (1 ppm) at one location (Austin Tobin Plaza) from a plume at the surface of the debris area.
All 3 of the other samples (Wash Tent, North Tower, South Tower) did not note any benzene above the detection limit (20 ppbv).
1,3-butadiene exceeded OSHA TWA PEL (1 ppm) at one location (Austin Tobin Plaza) from a plume at the surface of the debris area.
All 3 of the other samples (Wash Tent, North Tower, South Tower) did not note any 1,3-butadiene above the detection limit (20 ppbv).
VOCs were not identified above the detection limit at the North Tower and Washing Tent at breathing level.
Note: The Austin Tobin plume sample was collected in the vicinity of a burning acetylene cylinder.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/08/02**
Sampling Date and Time: **2/6/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
02/06/02	TTW-00258	L	720	Air	<7.0	<0.004	***1	0	8	0.0043
02/06/02	TTW-00259	N	720	Air	<7.0	<0.004	0	0	<8.00	<0.0043
02/06/02	TTW-00260	Q	560	Air	<7.0	<0.005	***1	0	8	0.0065
02/06/02	TTW-00261	F	720	Air	7.64	0.004	0	0	<8.00	<0.0043
02/06/02	TTW-00262	A	694	Air	10.19	0.006	0	0	<8.00	<0.0044
02/06/02	TTW-00263	B	662	Air	<7.0	<0.004	0	0	<8.00	<0.0047
02/06/02	TTW-00264	C	720	Air	8.28	0.004	0	0	<8.00	<0.0043
02/06/02	TTW-00265	D	720	Air	<7.0	<0.004	0	0	<8.00	<0.0043
02/06/02	TTW-00266	K	720	Air	<7.0	<0.004	0	0	<8.00	<0.0043
02/06/02	TTW-00267	T	720	Air	<7.0	<0.004	0	0	<8.00	<0.0043
02/06/02	TTW-00268	V	706	Air	<7.0	<0.004	0	0	<8.89	<0.0048
02/06/02	TTW-00269	S	720	Air	<7.0	<0.004	***1	0	8.89	0.0048
02/06/02	TTW-00270	S-Dup	720	Air	<7.0	<0.004	***1	0	8.89	0.0048
02/06/02	TTW-00271	E	672	Air	<7.0	<0.004	0	0	<8.00	<0.0046
02/06/02	TTW-00272	W	720	Air	<7.0	<0.004	***3	0	24	0.0128
02/06/02	TTW-00273	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/06/02	TTW-00274	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No sample taken for Location J - pump fault - not able to read sample
No sample taken for Location U and U-Dup -access denied to sample location - Presidential arrival

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/08/02**
Sampling Date and Time: 2/6/02 1200 to 2359

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/06/02	TTW-00278	L	1118	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/06/02	TTW-00279	M1	1226	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/06/02	TTW-00280	M1-Dup	1056	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/06/02	TTW-00281	N	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/06/02	TTW-00282	J	1052	Air	7.64	0.003	*****1	0	13.33	0.0049
02/06/02	TTW-00283	Q	1018	Air	<7.0	<0.003	0	0	<13.33	<0.0050
02/06/02	TTW-00284	A-Dup	1160	Air	7.01	0.002	*****1	0	13.33	0.0044
							0	******1	13.33	0.0044
							***3		40	0.0133
							Total		*66.67*	*0.0221*
02/06/02	TTW-00285	B	1074	Air	14.01	0.005	***1	0	13.33	0.0048
02/06/02	TTW-00286	C	1190	Air	7.64	0.003	0	0	<13.33	<0.0043
02/06/02	TTW-00287	D	1106	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/06/02	TTW-00288	K	984	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/06/02	TTW-00289	U	1128	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/06/02	TTW-00290	V	1118	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/06/02	TTW-00291	S	1106	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/06/02	TTW-00292	E	1106	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/06/02	TTW-00293	W	1150	Air	16.56	0.005	0	0	<13.33	<0.0045

Samples for Location F and A were not taken due to pump fault
Note that samples TTW-00275, 276, and 277 were not included in this chain of custody due to destroyed labels

Sampling Locations:
A: NE corner of West Broadway & Barclay
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D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
******Amosite

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/08/02**
Sampling Date and Time: **2/7/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/07/02	FB020702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/07/02	TB020702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/07/02	TTW-00294	L	1120	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/07/02	TTW-00295	M1	978	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/07/02	TTW-00296	N	1008	Air	<7.0	<0.003	0	***1	11.43	0.0044
02/07/02	TTW-00297	Q	990	Air	<7.0	<0.003	***3	0	34.29	0.0133
02/07/02	TTW-00298	C	888	Air	<7.0	<0.003	0	0	<10.00	<0.0043
02/07/02	TTW-00299	D	1116	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/07/02	TTW-00300	D-Dup	1090	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/07/02	TTW-00301	K	1024	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/07/02	TTW-00302	V	1102	Air	<7.0	<0.002	0	0	<13.33	<0.0047

Samples for Locations J, J-Dup, F, A, B, E and W were not submitted due to programming error of pumps.
No sample taken for Location U due to Presidential arrival, too close to presidential landing
A sample for Location S was not submitted due to the pump and cassette were tampered with before Tetra Tech Arrival.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/10/02**

Sampling Date and Time: **2/7/02 1200 to 2359**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/07/02	TTW-00303	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/07/02	TTW-00304	M1	1244	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/07/02	TTW-00305	N	1218	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/07/02	TTW-00306	N-Dup	1218	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/07/02	TTW-00307	J	1086	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/07/02	TTW-00308	Q	1240	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/07/02	TTW-00309	F	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/07/02	TTW-00310	A	990	Air	7.01	0.003	0	0	<11.43	<0.0044
02/07/02	TTW-00311	C	1254	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/07/02	TTW-00312	D	1166	Air	7.64	0.003	0	0	<13.33	<0.0044
02/07/02	TTW-00313	V	1176	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/07/02	TTW-00314	E	1102	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/07/02	TTW-00315	W	1268	Air	7.64	0.002	0	0	<16.00	<0.0049

No samples taken for Locations B, S, and E-Dup due to programming error of pumps
No sample taken for Location K, due to low battery
No sample for Location U, due to pump being turned off and tampered with.

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/6/02 0743 to 2200

Data Validation Date: 02/08/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/06/02	LF02654	P-1	1260.00	Air	8.92	0.003	0	0	<15.75	<0.0048
02/06/02	LF02655	P-2	799.50	Air	<7.0	<0.003	0	0	<9.84	<0.0047
02/06/02	LF02656	P-3	1240.70	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/06/02	LF02657	P-4	1200.50	Air	7.64	0.003	0	0	<13.12	<0.0042
02/06/02	LF02658	P-5	1202.25	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/06/02	LF02659	P-6	1029.00	Air	<7.0	<0.003	0	0	<13.12	<0.0049
02/06/02	LF02660	P-7	1365.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/06/02	LF02661	P-8	1237.25	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/06/02	LF02662	W-11	1225.00	Air	21.66	0.007	***5	***2	110.24	0.0346
02/06/02	LF02663	W-12A	677.25	Air	14.01	0.008	***5	0	43.74	0.0249
02/06/02	LF02664	W-12B	1139.25	Air	10.19	0.003	***3	0	39.37	0.0133
02/06/02	LF02665	B-13	1260.00	Air	12.74	0.004	***1	0	15.75	0.0048
02/06/02	LF02666	B-14	967.75	Air	<7.0	<0.003	0	0	<11.25	<0.0045
02/06/02	LF02667	T-15	1260.00	Air	7.64	0.002	0	***1	15.75	0.0048
02/06/02	LF02668	T-16	1260.00	Air	8.92	0.003	***3	0	47.24	0.0144
02/06/02	LF02669	O-17	939.75	Air	<7.0	<0.003	0	0	<11.25	<0.0046
02/06/02	LF02670	O-18	105.00	Air	<7.0	<0.026	0	0	<7.87	<0.0289
02/06/02	LF02671	O-19	908.25	Air	<7.0	<0.003	0	0	<11.25	<0.0048
02/06/02	LF02672	MPHS-20	607.25	Air	<7.0	<0.004	***1	0	7.87	0.0050
02/06/02	LF02673	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/06/02	LF02674	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-06-02rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/7/02 0743 to 2200

Data Validation Date: 02/11/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/07/02	LF02675	P-1	1359.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/07/02	LF02676	P-2	1281.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/07/02	LF02677	P-3	1277.15	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/07/02	LF02678	P-4	1226.40	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/07/02	LF02679	P-5	1320.90	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/07/02	LF02680	P-6	1047.55	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/07/02	LF02681	P-7	1291.50	Air	<7.0	<0.002	0	0	<7.87	<0.0023
02/07/02	LF02682	P-8	1176.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/07/02	LF02683	W-11	1146.60	Air	NA (1)	NA (1)	***13	0	170.6	0.0573
02/07/02	LF02684	W-12A	320.25	Air	14.01	0.017	***1	***4	39.37	0.0473
02/07/02	LF02685	W-12B	1043.00	Air	8.92	0.003	0	0	<13.12	<0.0048
02/07/02	LF02686	B-13	1197.00	Air	10.19	0.003	0	0	<13.12	<0.0042
02/07/02	LF02687	B-14	1054.20	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/07/02	LF02688	T-15	1260.00	Air	343.95	0.105	***2	0	31.50	0.0096
02/07/02	LF02689	T-16	1260.00	Air	26.75	0.008	0	***1	15.75	0.0048
02/07/02	LF02690	O-17	1302.75	Air	8.92	0.003	0	0	<15.75	<0.0047
02/07/02	LF02691	O-18	135.00	Air	<7.0	<0.020	0	0	<15.75	<0.0449
02/07/02	LF02692	O-19	1248.75	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/07/02	LF02693	MPHS-20	532.00	Air	<7.0	<0.005	0	0	<7.87	<0.0057
02/07/02	LF02694	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/07/02	LF02695	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-07-02rev1.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 8, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D076	2	1012	08:26	10	00:00:30	1	0.0	0.1	25.3	344.0
3	-74.198685	40.570054	D079	4	1011	08:25	10	00:00:30	1	0.0	0.1	33.4	0.6
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D075	2	1009	08:25	10	00:00:30	1	0.0	0.1	25.7	625.6
6	-74.207406	40.563818	D078	2	507	04:14	10	00:00:30	1	0.0	0.1	38.9	616.9
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	9	676	05:38	10	00:00:30	1	0.0	0.1	32.6	261.2

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 9, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	3	1022	08:31	10	00:00:30	1	0.0	0.1	19.5	166.3
3	-74.198685	40.570054	D078	2	563	04:41	10	00:00:30	1	0.0	0.1	21.6	126.2
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	2	1022	08:31	10	00:00:30	1	0.0	0.1	24.7	367.3
6	-74.207406	40.563818	D079	5	1025	08:33	10	00:00:30	1	0.0	0.1	21.1	162.5
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	9	1026	08:33	10	00:00:30	1	0.0	0.1	22.0	123.9

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 11, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	4	965	08:03	10	00:00:30	1	0.0	0.1	10.0	383.8
3	-74.198685	40.570054	D078	2	532	04:26	10	00:00:30	1	0.0	0.1	9.2	745.4
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	3	964	08:02	10	00:00:30	1	0.0	0.1	6.8	101.4
6	-74.207406	40.563818	D079	6	968	08:04	10	00:00:30	1	0.0	0.1	3.6	172.2
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	10	969	08:05	10	00:00:30	1	0.0	0.1	7.4	59.9

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 12, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2	2.0
Start Time	0637	0639	0634
Stop Time	1450	1456	1447
Run Time (minutes)	493	497	493
Maximum Concentration (ug/m^3)	152.95	78.39	71.03
Average Concentration (ug/m^3)	27.91	13.38	16.00

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/12/02

File Name	NYC1031	NYC1032	NYC1033	NYC1036	NYC1040	NYC1038
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air	Plume		Plume
Sample Number			A07457	A07458	A07460	A07459
Sample Height			Breathing Level	Ground Level	Breathing Level	Ground Level
Sample Volume		250 mL	250 mL	10 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	500	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	**3300**	RL	**100**
Chlorodifluoromethane	RL	RL	RL	RL	RL	**180**
Dichlorodifluoromethane	RL	RL	RL	RL	RL	**190**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	**1400**	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	**160**
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	**120000**	RL	**66**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**160**
MTBE	RL	RL	RL	RL	RL	**1400**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	**87**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	**670**	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	**120**
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	**7000**	RL	RL
Heptane	RL	RL	RL	RL	RL	**21**
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	**1400**	RL	**54**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	**82**
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	**560**	RL	**36**
O-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	**660**	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	**720**	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, February 14, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 3:30 p.m. on February 14

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 39 samples taken in and around ground zero on February 8 and February 9. EPA also sampled for asbestos at two additional lower Manhattan locations on February 5 and February 6. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities. This brings the total number of air samples collected and analyzed for lower Manhattan to 5,923, with 16 samples above the standard (11 of these were collected prior to September 30; the other five were collected on October 9, November 27, December 27, January 14 and February 5).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) on February 5 and February 6. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Nineteen air samples collected on February 8 were analyzed for asbestos. All samples were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on February

12 at the Staten Island Landfill. There were no significant readings.

Metals - A total of 5 samples were collected on January 16. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 13 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Dioxin - A total of 9 samples were collected on January 31 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

PCBs - A total of 29 samples were collected on January 25, 29 and 31 at various locations in Lower Manhattan. PCBs were not detected.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 13 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 13 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the Port Authority Station, the South Tower debris pile, and the North Tower debris pile either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, February 14, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 8, 0001 - 1200 hrs)

All 11 samples analyzed were below the TEM AHERA standard.
7 samples (Locations L, L-duplicate, F, A, S, E, and W) were not collected due to equipment malfunctions.

NYC / ER (Feb 8, 1200 - 2359 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
3 samples (Locations E, Q, and D-duplicate) were not collected due to equipment malfunctions.

NYC / ER (Feb 9, 0001 - 1200 hrs)

All 12 samples analyzed were below the TEM AHERA standard.
6 samples (Locations L, M1, A, A-duplicate, C-duplicate and U) were not collected due to equipment malfunctions.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 8, 0743 - 2200 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume recorded.

Fresh Kills (Jan 16) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

Fresh Kills (Feb 12) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Jan 31) - Dioxin

All 9 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
1 sample (Location C) was not collected due to damaged equipment.
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 25) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Jan 29) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Jan 31) - PCBs

All 9 samples analyzed did not detect any PCBs.
1 sample (Location C) was not collected due to damaged equipment.

NYC / ER (Feb 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 13) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 12.01 ug/m^3 with a maximum reading of 98.91 ug/m^3.
Station N had an average 8.56 ug/m^3 with a maximum reading of 52.58 ug/m^3.
Station R had an average 10.42 ug/m^3 with a maximum reading of 66.75 ug/m^3.

NYC / ER (Feb 13) - Volatile Organics (Mobile Laboratory)

Aside from one compound identified above the detection limit (20 ppbv) at the Port Authority Station [B-4 level near F-11 stairwell], all other volatile organic compounds were not detected in any of the other five samples collected (Washing Tent, Austin Tobin Plaza [B-5 level], North Tower, South Tower [steam plume north side of Tully ramp], and Port Authority Station [B-4 level]).
Data is not attached as an electronic file.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, February 14, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 8, 0001 - 1200 hrs)

All 11 samples analyzed were below the TEM AHERA standard.
7 samples (Locations L, L-duplicate, F, A, S, E, and W) were not collected due to equipment malfunctions.

NYC / ER (Feb 8, 1200 - 2359 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
3 samples (Locations E, Q, and D-duplicate) were not collected due to equipment malfunctions.

NYC / ER (Feb 9, 0001 - 1200 hrs)

All 12 samples analyzed were below the TEM AHERA standard.
6 samples (Locations L, M1, A, A-duplicate, C-duplicate and U) were not collected due to equipment malfunctions.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 8, 0743 - 2200 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume recorded.

Fresh Kills (Jan 16) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

Fresh Kills (Feb 12) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Jan 31) - Dioxin

All 9 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
1 sample (Location C) was not collected due to damaged equipment.
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 25) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Jan 29) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Jan 31) - PCBs

All 9 samples analyzed did not detect any PCBs.
1 sample (Location C) was not collected due to damaged equipment.

NYC / ER (Feb 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 13) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 12.01 ug/m^3 with a maximum reading of 98.91 ug/m^3.
Station N had an average 8.56 ug/m^3 with a maximum reading of 52.58 ug/m^3.
Station R had an average 10.42 ug/m^3 with a maximum reading of 66.75 ug/m^3.

NYC / ER (Feb 13) - Volatile Organics (Mobile Laboratory)

Aside from one compound identified above the detection limit (20 ppbv) at the Port Authority Station [B-4 level near F-11 stairwell], all other volatile organic compounds were not detected in any of the other five samples collected (Washing Tent, Austin Tobin Plaza [B-5 level], North Tower, South Tower [steam plume north side of Tully ramp], and Port Authority Station [B-4 level]).
Data is not attached as an electronic file.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/10/02**
Sampling Date and Time: 2/8/02 0001 to 1200

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/08/02	FB020802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/08/02	TB0207028	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/08/02	TTW-00316	N	1114	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/08/02	TTW-00317	J	1192	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/08/02	TTW-00318	Q	1378	Air	<7.0	<0.002	0	0	<13.33	<0.0037
02/08/02	TTW-00319	Q-Dup	1040	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/08/02	TTW-00320	B	904	Air	<7.0	<0.003	0	0	<11.43	<0.0049
02/08/02	TTW-00321	C	1136	Air	7.01	0.002	0	0	<13.33	<0.0045
02/08/02	TTW-00322	D	1266	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/08/02	TTW-00323	K	1194	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/08/02	TTW-00324	K-Dup	1202	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/08/02	TTW-00325	U	1102	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/08/02	TTW-00326	V	1118	Air	<7.0	<0.002	0	0	<13.33	<0.0046

Samples for Locations L, L-Dup, F, A, S, E, and W were not submitted due to flow rate increasing between 2.1 and 2.5 liters/minute, the pump faulted and shut off. No sample could be taken

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/10/02**
Sampling Date and Time: **2/8/02 1200 to 2359**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/08/02	TTW-00327	L	1056	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/08/02	TTW-00328	L-Dup	1138	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/08/02	TTW-00329	M1	1119.1	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/08/02	TTW-00330	N	1328	Air	<7.0	<0.002	0	0	<13.33	<0.0039
02/08/02	TTW-00331	J	980	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/08/02	TTW-00332	F	1368	Air	<7.0	<0.002	***1	0	16	0.0045
02/08/02	TTW-00333	A	1282	Air	8.92	0.003	0	0	<16.00	<0.0046
02/08/02	TTW-00334	B	1040	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/08/02	TTW-00335	C	530	Air	<7.0	<0.005	0	0	<8.00	<0.0058
02/08/02	TTW-00336	D	1074	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/08/02	TTW-00337	K	1054	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/08/02	TTW-00338	U	502	Air	<7.0	<0.005	0	0	<8.00	<0.0061
02/08/02	TTW-00339	U-Dup	1050	Air	<7.0	<0.003	0	0	<13.33	<0.0061
02/08/02	TTW-00340	V	1238	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/08/02	TTW-00341	S	1160	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/08/02	TTW-00342	W	622	Air	9.55	0.006	0	0	<8.00	<0.0050

Samples were not taken from Locations Q, and D- Dup due to programming error
Samples were not taken from Location E, due to pump fault.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: **2/9/02 0001 to 1200**

Data Validation Date: 02/11/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/09/02	FB020902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/09/02	TB0209028	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/09/02	TTW-00343	N	1144	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/09/02	TTW-00344	J	1020.3	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/09/02	TTW-00345	Q	1100	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/09/02	TTW-00346	F	961.8	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/09/02	TTW-00347	B	1092	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/09/02	TTW-00348	C	1092	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/09/02	TTW-00349	D	1240	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/09/02	TTW-00350	K	1012	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/09/02	TTW-00351	V	1314	Air	<7.0	<0.002	0	0	<16.00	<0.0047
02/09/02	TTW-00352	S	1070	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/09/02	TTW-00353	E	1024	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/09/02	TTW-00354	W	512	Air	<7.0	<0.003	0	0	<8.00	<0.0060

Samples for Locations L, , M1, A, A-Dup, C-Dup and U were not taken due to pump fault
The flow rate was approximately 2.2 - 2.5 L/min, creating too much pressure, cause pump to malfunction and turn off.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
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R: TAGA Bus Location
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U: Pier 6 Exit 2
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Key:
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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/8/02 0743 to 2200

Data Validation Date: 02/11/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/08/02	LF02696	P-1	1398.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/08/02	LF02697	P-2	1312.35	Air	<7.0	<0.002	***1	0	15.75	0.0046
02/08/02	LF02698	P-3	1281.15	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/08/02	LF02699	P-4	1386.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/08/02	LF02700	P-5	1351.35	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/08/02	LF02701	P-6	1047.55	Air	<7.0	<0.003	0	0	<15.75	<0.0058
02/08/02	LF02702	P-7	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/08/02	LF02703	P-8	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/08/02	LF02704	W-11	1370.00	Air	39.49	0.011	0	0	<15.75	<0.0044
02/08/02	LF02705	W-12A	956.25	Air	25.48	0.010	***1	0	11.25	0.0045
02/08/02	LF02706	W-12B	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/08/02	LF02707	B-13	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/08/02	LF02708	B-14	1302.60	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/08/02	LF02709	T-15	1440.00	Air	52.23	0.014	0	0	<15.75	<0.0042
02/08/02	LF02710	T-16	1440.00	Air	8.92	0.002	0	0	<15.75	<0.0042
02/08/02	LF02711	O-17	1364.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/08/02	LF02712	O-18	108.00	Air	<7.0	<0.025	0	0	<7.87	<0.0281
02/08/02	LF02713	O-19	1298.70	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/08/02	LF02714	MPHS-20	1426.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/08/02	LF02715	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/08/02	LF02716	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-08-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 2/5/02 1200 to 2400

Data Validation Date: 02/08/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/05/02	7093-18-0131	Park Row	1176	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/05/02	7093-19-0131	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/05/02	7093-15-0129	I.S. 143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/05/02	7094-09-0119	P.S. 154 (Bronx)	1340	Air	7.01	0.002	0	0	<16.00	<0.0046
02/05/02	7096-12-0125	P.S. 199 (Queens)	1144	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/05/02	7095-98-0125	P.S. 274(Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/05/02	7097-18-0122	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/10/02**
Sampling Date and Time: 2/6/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/06/02	7093-18-0132	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/06/02	7093-19-0132	Chambers Street	1200	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/06/02	7093-15-0130	I.S. 143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/06/02	7094-09-0120	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/06/02	7096-12-0126	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/06/02	7095-98-0126	P.S. 274(Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/06/02	7097-18-0123	P.S. 44 (S.I)	1148	Air	<7.0	<0.002	0	0	<13.33	<0.0045

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0069		WTC-0070		WTC-0064	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		4820	
Date Collected		-		-		-		01/16/02		01/16/02		01/16/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.26
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Calcium	ICAP	3.7	2.5	3.6	2.5	3.6	2.5	U	2.5	U	2.5	U	0.52
Chromium	ICAP	0.77	0.13	0.76	0.13	0.88	0.13	U	0.13	U	0.13	U	0.026
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Iron	ICAP	U	0.63	U	0.63	0.67	0.63	U	0.63	U	0.63	0.19	0.13
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0065		WTC-0066		WTC-0067		WTC-0068	
Location		P-8		O-17		O-18		O-19	
Air Volume (L)		3610		3670		5240		4980	
Date Collected		01/16/02		01/16/02		01/16/02		01/16/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.35	U	0.34	0.35	0.24	U	0.25
Antimony	AA-Fur	U	0.014	U	0.014	U	0.0095	U	0.01
Arsenic	AA-Fur	U	0.014	U	0.014	U	0.0095	U	0.01
Barium	ICAP	U	0.035	U	0.034	0.048	0.024	U	0.025
Beryllium	ICAP	U	0.014	U	0.014	U	0.0095	U	0.01
Cadmium	ICAP	U	0.035	U	0.034	U	0.024	U	0.025
Calcium	ICAP	2.2	0.69	1.9	0.68	1.7	0.48	0.53	0.5
Chromium	ICAP	0.071	0.035	U	0.034	U	0.024	U	0.025
Cobalt	ICAP	U	0.069	U	0.068	U	0.048	U	0.05
Copper	ICAP	U	0.069	U	0.068	U	0.048	U	0.05
Iron	ICAP	0.38	0.17	0.61	0.17	1.0	0.12	0.37	0.13
Lead	AA-Fur	0.031	0.014	0.021	0.014	0.021	0.0095	U	0.01
Magnesium	ICAP	U	3.5	U	3.4	U	2.4	U	2.5
Manganese	ICAP	U	0.035	U	0.034	U	0.024	U	0.025
Nickel	ICAP	U	0.069	U	0.068	U	0.048	U	0.05
Potassium	ICAP	U	14	U	14	U	9.5	U	10
Selenium	AA-Fur	U	0.014	U	0.014	U	0.0095	U	0.01
Silver	ICAP	U	0.035	U	0.034	U	0.024	U	0.025
Sodium	ICAP	U	3.5	U	3.4	U	2.4	U	2.5
Thallium	AA-Fur	U	0.014	U	0.014	U	0.0095	U	0.01
Vanadium	ICAP	U	0.069	U	0.068	U	0.048	U	0.05
Zinc	ICAP	U	0.069	0.072	0.068	0.063	0.048	U	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 12, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	1	962	08:01	10	00:00:30	1	0.0	0.1	19.1	432.2
3	-74.198685	40.570054	D078	1	28	00:14	10	00:00:30	1	0.0	0.1	23.1	190.5
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	961	08:00	10	00:00:30	1	0.0	0.1	10.8	1199.4
6	-74.207406	40.563818	D079	1	960	08:00	10	00:00:30	1	0.0	0.1	11.1	2165.4
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	1	797	08:00	10	00:00:30	1	0.0	0.1	26.5	6907.9

Air Samples - Modified Method 680 PCB results
Sampling Date 1/31/02

Sample No.	WG-7082-1P		06601		06602		06603		06604		06606	
Sampling Location	Method Blank		R		A		3A		B		D	
Sample Volume (L)	0		6390		3217.5		3368.75		3840		6105	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of MoCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of DiCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of TrCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of TeCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of PeCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of HxCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of HpCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of OcCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Sum of NoCBs	U	10.0	U	1.56	U	3.11	U	2.97	U	2.60	U	1.64
Total	0		0		0		0		0		0	

COC# 01/31/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERTC 2/12/02

1-31-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/31/02

Sample No.	06607		06608		06609		06610		06611		06612	
Sampling Location	S		P		E		E		Field Blank		Lot Blank	
Sample Volume (L)	6882.75		3257.25		3361.5		4759.5		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of MoCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of DiCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of TrCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of TeCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of PeCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of HxCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of HpCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of OcCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Sum of NoCBs	U	1.45	U	3.07	U	2.97	U	2.10	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 01/31/02-Dioxin

Air Samples - Modified Method 680 PCB results
Sampling Date 1/29/02

Sample No.	WG-7078-1P		06351		06352		06353		06354		06355		06356	
Sampling Location	Method Blank		R		A		3A		B		C		D	
Sample Volume (L)	0		6045		7096.5		7500		7308		5850		5945	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of MoCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of DiCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of TrCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of TeCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of PeCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of HxCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of HpCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of OcCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Sum of NoCBs	U	10.0	U	1.65	U	1.41	U	1.33	U	1.37	U	1.71	U	1.68
Total	0		0		0		0		0		0		0	

COC# 01/29/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 2/12/02

1-29-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/29/02

Sample No.	06357		06358		06359		06360		06361		06362	
Sampling Location	S		P		E		E		Field Blank		Lot Blank	
Sample Volume (L)	7365		6322		5421		6177		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of MoCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of DiCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of TrCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of TeCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of PeCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of HxCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of HpCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of OcCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Sum of NoCBs	U	1.36	U	1.58	U	1.84	U	1.62	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 01/29/02-Dioxin

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/31/02

Sample No.	WG7082-1			06601			06602			06603			06604			06606		
Sampling Location	Method Blank			R- TAGA			A-Barclay & West Broadway			Location 3A			B-Church & Dey St.			D Greenwich & Albany St.		
Volume (Liters)	0			6390			3217.5			3368.75			3840			6105		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0031	U		0.0062	U		0.0059	U		0.0052	U		0.0033
12378-PeCDD	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
123478-HxCDD	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
123678-HxCDD	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
123789-HxCDD	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
1234678-HpCDD	U		0.10	0.0012J		0.016	0.0020 J		0.031	U		0.030	0.0015 J		0.026	U	0.0010	0.016
OCDD	U		0.20	U		0.031	U		0.062	U	0.0062	0.059	U		0.052	U		0.033
2378-TCDF	U		0.020	U		0.0031	U		0.0062	U		0.0059	U		0.0052	U		0.0033
12378-PeCDF	U	0.0033	0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
23478-PeCDF	0.0030J		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
123478-HxCDF	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
123678-HxCDF	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
234678-HxCDF	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
123789-HxCDF	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
1234678-HpCDF	U		0.10	U	0.0004	0.016	U		0.031	U		0.030	U		0.026	U		0.016
1234789-HpCDF	U		0.10	U		0.016	U		0.031	U		0.030	U		0.026	U		0.016
OCDF	U		0.20	U		0.031	U		0.062	U		0.059	U		0.052	U		0.033
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			0.0012			0.0020			U			0.0015			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	0.0030			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0015			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0347			0.0014			0.0026			0.0025			0.0022			0.0015		

COC# 01/31/02 dioxin

B= Not detected due to blank contamination

EMPC: Estimated Maximum Possible Concentration

TEQ: Toxicity Equivalent

ERTC 2/12/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

1-31-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 1/31/02

Sample No.	06607			06608			06609			06610			06611			06612		
Sampling Location	Location S			P-Albany St. & South End			E-Liberty St. & South End Ave.			E-Liberty St. & South End Ave.			Field Blank			Lot Blank		
Volume (Liters)	6882.75			3257.25			3361.5			4759.5			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0029	U		0.0061	U		0.0060	U		0.0042	U		0.020	U		0.020
12378-PeCDD	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
123478-HxCDD	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
123678-HxCDD	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
123789-HxCDD	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
1234678-HpCDD	U	0.0009	0.015	U	0.0019	0.031	U		0.030	U	0.0012	0.021	U		0.10	U	0.0143	0.10
OCDD	U		0.029	U		0.061	U		0.060	U	0.0027	0.042	U		0.20	0.0296 J		0.20
2378-TCDF	U		0.0029	U		0.0061	U		0.0060	U		0.0042	U		0.020	U		0.020
12378-PeCDF	U		0.015	0.0006 J		0.031	U		0.030	U		0.021	U		0.10	U		0.10
23478-PeCDF	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
123478-HxCDF	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
123678-HxCDF	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
234678-HxCDF	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
123789-HxCDF	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
1234678-HpCDF	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
1234789-HpCDF	U		0.015	U		0.031	U		0.030	U		0.021	U		0.10	U		0.10
OCDF	U		0.029	U		0.061	U		0.060	U		0.042	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			0.0006			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0015			0.0032			0.0023			0.0021			0.0411			0.0421		

COC# 01/31/02 dioxin

Air Samples - Modified Method 680 PCB results
Sampling Date 1/25/02

Sample No.	WG-7072-1P		06301		06302		06303		06304		06305		06306	
Sampling Location	Method Blank		R		A		3A		3A		B		C	
Sample Volume (L)	0		6931		6479		5413.75		6448		6375		6206	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of MoCBs	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of DiCBs	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of TrCBs	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of TeCBs	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of PeCBs	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of HxCBs	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of HpCBs	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of OcCBs	U	-10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Sum of NoCBs	U	10.0	U	1.44	U	1.54	U	1.85	U	1.55	U	1.57	U	1.61
Total	0		0		0		0		0		0		0	

COC# 01/25/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 2/12/02

1-25-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 1/25/02

Sample No.	06307		06308		06309		06310		06311		06312	
Sampling Location	D		P		S		E		Field Blank		Lot Blank	
Sample Volume (L)	6380		6293		6684.5		6256		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of MoCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of DiCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of TrCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of TeCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of PeCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of HxCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of HpCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of OcCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Sum of NoCBs	U	1.57	U	1.59	U	1.50	U	1.60	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 01/25/02-Dioxin

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 13, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2	2.0
Start Time	0634	0637	0631
Stop Time	1435	1439	1431
Run Time (minutes)	481	482	480
Maximum Concentration (ug/m^3)	98.91	52.58	66.75
Average Concentration (ug/m^3)	12.01	8.56	10.42

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, February 15, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:15 p.m. on February 15

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 102 samples taken in and around ground zero from February 9 through February 12. EPA also sampled for asbestos at two additional lower Manhattan locations from February 7 through February 9. All but one sample showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

One sample, taken on February 11 at Location B (Church & Dey Streets) showed 213 structures per square millimeter. (Note that a "field duplicate" collected at the same time and location did not detect any structures.) This brings the total number of air samples collected and analyzed for lower Manhattan to 6,031, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154: 333 East 135th St, Bronx, P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 44 (80 Maple Parkway, Staten Island) and P.S. 199 (3290 48th St., Queens) from February 7 through February 9. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Fifty-six air samples collected from February 9 through February 11 were analyzed for asbestos. All samples were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on February 13 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 14 in the following locations: L (north east side of Stuyvesant High School); N (south side of Pier 25); and R (north west side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, February 15, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 9, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 10, 0001 - 1115 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 10, 1200 - 2359 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
3 samples (Locations M1-duplicate, V, and W) were not collected due to equipment malfunctions.

NYC / ER (Feb 11, 0001 - 1117 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations Q and W) were not collected due to equipment malfunctions.

NYC / ER (Feb 11, 1200 - 2359 hrs)

1 of 17 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location B (213.33 S/mm^2).
A field duplicate collected at Location B did not detect any structures (<13.33 S/mm^2).
1 sample (Location Q) was not collected due to an equipment malfunction.

NYC / ER (Feb 12, 0001 - 1133 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 9, 0751 - 2110 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume recorded.

Fresh Kills (Feb 10, 0743 - 1943 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 11, 0755 - 2138 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location B-14) was not analyzed due to overloading of particulates.
1 sample (Location P-4) was not analyzed due to an equipment malfunction.

Fresh Kills (Feb 13) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Feb 7- 9) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 21 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 13) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 31.32 ug/m^3 with a maximum reading of 128.35 ug/m^3.
Station N had an average 15.38 ug/m^3 with a maximum reading of 35.58 ug/m^3.
Station R had an average 17.20 ug/m^3 with a maximum reading of 105.50 ug/m^3.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/12/02**
Sampling Date and Time: 2/9/02 1200 to 2359

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/09/02	TTW-00355	L	1096.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/09/02	TTW-00356	M1	486.2	Air	<7.0	<0.006	0	0	<8.00	<0.0063
02/09/02	TTW-00357	N	906.1	Air	<7.0	<0.003	0	0	<11.43	<0.0049
02/09/02	TTW-00358	J	423.5	Air	<7.0	<0.006	0	0	<8.00	<0.0073
02/09/02	TTW-00359	J-Dup	788.4	Air	<7.0	<0.003	0	0	<8.89	<0.0043
02/09/02	TTW-00360	Q	1043.8	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/09/02	TTW-00361	F	1233.1	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/09/02	TTW-00362	A	1093.1	Air	<7.0	<0.002	0	0	<11.43	<0.0040
02/09/02	TTW-00363	B	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/09/02	TTW-00364	B-Dup	1087.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/09/02	TTW-00365	C	1164.6	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/09/02	TTW-00366	D	1110.1	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/09/02	TTW-00367	K	1101.6	Air	<7.0	<0.002	0	0	<11.43	<0.0040
02/09/02	TTW-00368	U	1011.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/09/02	TTW-00369	V	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/09/02	TTW-00370	S	1113	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/09/02	TTW-00371	E	793.9	Air	<7.0	<0.003	0	0	<8.89	<0.0043
02/09/02	TTW-00372	W	1203.6	Air	7.64	0.002	0	0	<13.33	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-09-02-pmrev2.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/12/02**
Sampling Date and Time: **2/10/02 0001 to 1115**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/10/02	FB021002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/10/02	TB021002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/10/02	TTW-00373	L	1048.9	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/10/02	TTW-00374	M1	1062.5	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/10/02	TTW-00375	N	847	Air	<7.0	<0.003	0	0	<8.89	<0.0040
02/10/02	TTW-00376	J	1120	Air	<7.0	<0.002	***2	0	26.67	0.0092
02/10/02	TTW-00377	Q	1170	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/10/02	TTW-00378	F	1057	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/10/02	TTW-00379	F-Dup	1011.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/10/02	TTW-00380	A	986	Air	7.01	0.003	0	0	<11.43	<0.0045
02/10/02	TTW-00381	B	1048.9	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/10/02	TTW-00382	C	1091.4	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/10/02	TTW-00383	D	1147.5	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/10/02	TTW-00384	K	777.6	Air	<7.0	<0.003	0	0	<11.43	<0.0057
02/10/02	TTW-00385	U	976.5	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/10/02	TTW-00386	V	1088.5	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/10/02	TTW-00387	S	1083.25	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/10/02	TTW-00388	S-Dup	1111.8	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/10/02	TTW-00389	E	1144.1	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/10/02	TTW-00390	W	1025.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
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P: NE corner of South End Ave. & Albany
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R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (filers) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/13/02**
Sampling Date and Time: **2/10/02 1200 to 2359**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/10/02	TTW-00391	L	1058.75	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/10/02	TTW-00392	M1	502.25	Air	<7.0	<0.005	0	0	<8.00	<0.0061
02/10/02	TTW-00393	N	1055.25	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/10/02	TTW-00394	J	1018.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/10/02	TTW-00395	Q	1098	Air	8.92	0.003	0	0	<13.33	<0.0047
02/10/02	TTW-00396	Q-Dup	1110	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/10/02	TTW-00397	F	1058.75	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/10/02	TTW-00398	A	488.25	Air	<7.0	<0.006	0	0	<8.00	<0.0063
02/10/02	TTW-00399	B	1200.5	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/10/02	TTW-00400	C	1020	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/10/02	TTW-00401	D	1102.5	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/10/02	TTW-00402	K	1053.5	Air	7.64	0.003	0	0	<13.33	<0.0049
02/10/02	TTW-00403	U	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/10/02	TTW-00404	S	519.75	Air	<7.0	<0.005	0	0	<8.00	<0.0059
02/10/02	TTW-00405	E	1090.8	Air	<7.0	<0.002	0	0	<13.33	<0.0047

No samples were taken for Locations M1-dup, V and W due to pump fail.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball cl)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/12/02**
Sampling Date and Time: **2/12/02 0001 to 1133**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/12/02	FB021202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/12/02	TB021202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/12/02	TTW-00439	L	1067.5	Air	<7.0	<0.003	***2	0	26.67	0.0096
02/12/02	TTW-00440	M1	948.5	Air	<7.0	<0.003	***2	0	22.86	0.0093
02/12/02	TTW-00441	N	1045.8	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/12/02	TTW-00442	J	1009.75	Air	<7.0	<0.003	***3	0	34.29	0.0131
02/12/02	TTW-00443	Q	1247.4	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/12/02	TTW-00444	Q-Dup	1114.2	Air	<7.0	<0.002	***2	0	26.67	0.0092
02/12/02	TTW-00445	F	1011.5	Air	<7.0	<0.003	***2	0	22.86	0.0087
02/12/02	TTW-00446	A	980	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/12/02	TTW-00447	B	936	Air	9.55	0.004	***2	0	22.86	0.0094
02/12/02	TTW-00448	C	1209.6	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/12/02	TTW-00449	C-Dup	1041.25	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/12/02	TTW-00450	D	1097.25	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/12/02	TTW-00451	K	541.8	Air	<7.0	<0.004	***1	0	8	0.0057
02/12/02	TTW-00452	U	464.4	Air	<7.0	<0.006	0	0	<8.00	<0.0066
02/12/02	TTW-00453	V	1058.75	Air	8.28	0.003	0	0	<13.33	<0.0048
02/12/02	TTW-00454	S	1034.25	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/12/02	TTW-00455	E	1120	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/12/02	TTW-00456	W	1130.4	Air	18.47	0.006	0	0	<13.33	<0.0045

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/11/02**
Sampling Date and Time: 2/7/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/07/02	7093-18-0133	Park Row	1246	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/07/02	7093-19-0133	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/07/02	7093-15-0131	I.S. 143	1366	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/07/02	7094-09-0121	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/07/02	7096-12-0127	P.S. 199 (Queens)	1430	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/07/02	7095-98-0127	P.S. 274(Brooklyn)	1356	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/07/02	7097-18-0124	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 2/8/02 1200 to 2400

Data Validation Date: 02/12/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/08/02	7093-18-0134	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/08/02	7093-19-0134	Chambers Street	1238	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/08/02	7093-15-0132	I.S. 143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/08/02	7094-09-0127	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/08/02	7096-12-0128	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/08/02	7095-98-0128	P.S. 274(Brooklyn)	1064	Air	<7.0	<0.003	0	0	<13.33	<0.0046
02/08/02	7097-18-0125	P.S. 44 (S.I)	1080	Air	<7.0	<0.002	0	0	<13.33	<0.0048

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/13/02**
Sampling Date and Time: 2/9/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/09/02	7093-18-0135	Park Row	1142	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/09/02	7093-19-0135	Chambers Street	1226	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/09/02	7093-15-0133	I.S. 143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/09/02	7094-09-0123	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/09/02	7096-12-0129	P.S. 199 (Queens)	1276	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/09/02	7095-98-0129	P.S. 274(Brooklyn)	1312	Air	<7.0	<0.002	0	0	<16.00	<0.0047
02/09/02	7097-18-0126	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/10/02 0743 to 1943

Data Validation Date: 02/13/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/10/02	LF02738	P-1	1440.00	Air	<7.0	<0.002	0	0.	<15.75	<0.0042
02/10/02	LF02739	P-2	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/10/02	LF02740	P-3	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/10/02	LF02741	P-4	1276.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/10/02	LF02742	P-5	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/10/02	LF02743	P-6	1157.10	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/10/02	LF02744	P-7	1398.15	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/10/02	LF02745	P-8	1252.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/10/02	LF02746	W-11	1398.15	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/10/02	LF02747	W-12A	972.00	Air	11.46	0.005	***1	***1	22.50	0.0089
02/10/02	LF02748	W-12B	1398.15	Air	<7.0	<0.002	***1	0	15.75	0.0043
02/10/02	LF02749	B-13	1408.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/10/02	LF02750	B-14	1213.20	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/10/02	LF02751	T-15	1404.00	Air	11.46	0.003	0	0	<15.75	<0.0043
02/10/02	LF02752	T-16	1440.00	Air	11.46	0.003	0	0	<15.75	<0.0042
02/10/02	LF02753	O-17	1438.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/10/02	LF02754	O-18	1184.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/10/02	LF02755	O-19	1269.20	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/10/02	LF02756	MPHS-20	841.50	Air	<7.0	<0.003	0	0	<9.84	<0.0045
02/10/02	LF02757	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/10/02	LF02758	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-10-02-rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/9/02 0751 to 2110

Data Validation Date: 02/12/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/09/02	LF02717	P-1	1364.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/09/02	LF02718	P-2	1352.00	Air	<7.0	<0.002	***1	0	<15.75	<0.0045
02/09/02	LF02719	P-3	1329.90	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/09/02	LF02720	P-4	1396.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/09/02	LF02721	P-5	1512.00	Air	<7.0	<0.002	0	0	<15.75	<0.0040
02/09/02	LF02722	P-6	1270.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/09/02	LF02723	P-7	1372.80	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/09/02	LF02724	P-8	1358.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/09/02	LF02725	W-11	1436.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/09/02	LF02726	W-12A	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/09/02	LF02727	W-12B	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/09/02	LF02728	B-13	1314.05	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/09/02	LF02729	B-14	1334.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/09/02	LF02730	T-15	1440.00	Air	7.64	0.002	0	0	<15.75	<0.0042
02/09/02	LF02731	T-16	1440.00	Air	<7.0	<0.002	***1	0	15.75	0.0042
02/09/02	LF02732	O-17	1428.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/09/02	LF02733	O-18	120.00	Air	<7.0	<0.002	0	0	<7.87	<0.0253
02/09/02	LF02734	O-19	1295.60	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/09/02	LF02735	MPHS-20	1440.00	Air	<7.0	<0.002	0	0	<15.75	0.0042
02/09/02	LF02736	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/09/02	LF02737	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-09-02rev.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/11/02 0755 to 2138

Data Validation Date: 02/14/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/11/02	LF02759	P-1	1284.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/11/02	LF02760	P-2	1380.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/11/02	LF02761	P-3	1164.60	Air	7.64	0.003	0	0	<13.12	<0.0043
02/11/02	LF02763	P-5	1348.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/11/02	LF02764	P-6	1146.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/11/02	LF02765	P-7	1170.75	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/11/02	LF02766	P-8	1344.60	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/11/02	LF02767	W-11	1402.00	Air	15.29	0.004	***1	0	15.75	0.0043
02/11/02	LF02768	W-12A	1152.00	Air	7.64	0.003	***3	0	47.24	0.0158
02/11/02	LF02769	W-12B	1200.00	Air	<7.0	<0.002	***1	0	13.12	0.0042
02/11/02	LF02770	B-13	1211.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/11/02	LF02771	B-14	1301.75	Air	NA (1)	NA(1)	NA(1)	NA(1)	NA(1)	NA(1)
02/11/02	LF02772	T-15	1440.00	Air	11.46	0.003	0	0	<15.75	<0.0042
02/11/02	LF02773	T-16	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/11/02	LF02774	O-17	1387.85	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/11/02	LF02775	O-18	1292.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/11/02	LF02776	O-19	1254.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/11/02	LF02777	MPHS-20	1340.70	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/11/02	LF02778	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/11/02	LF02779	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Sample LF02762 was voided No sample submitted

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-02-11-02rev.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/12/02**
Sampling Date and Time: **2/11/02 0001 to 1117**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/11/02	FB021102	Field Blank	0	Air	<7.0	n/a	NA(3)	NA(2)	NA(2)	NA(2)
02/11/02	TB021102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/11/02	TTW-00406	L	1062	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/11/02	TTW-00407	M1	406.8	Air	<7.0	<0.007	0	0	<8.00	<0.0076
02/11/02	TTW-00408	N	392	Air	<7.0	<0.007	0	0	<8.00	<0.0079
02/11/02	TTW-00409	N-Dup	1008	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/11/02	TTW-00410	J	458.5	Air	<7.0	<0.006	0	0	<8.00	<0.0067
02/11/02	TTW-00411	F	1200.6	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/11/02	TTW-00412	A	1044	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/11/02	TTW-00413	B	997.2	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/11/02	TTW-00414	C	1132.2	Air	7.64	0.003	0	0	<13.33	<0.0045
02/11/02	TTW-00415	D	1153.8	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/11/02	TTW-00416	D-Dup	1018.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/11/02	TTW-00417	K	1025.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/11/02	TTW-00418	U	982.6	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/11/02	TTW-00419	V	1062	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/11/02	TTW-00420	S	1098	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/11/02	TTW-00421	E	1137.6	Air	<7.0	<0.002	0	0	<13.33	<0.0045

No sample taken for Locations Q and W, due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/14/02**
Sampling Date and Time: **2/11/00 1200 to 2359**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/11/00	TTW-00422	L	1149.5	Air	<7.0	<0.002	0	0	<13.33	<0.0045
01/00/00	TTW-00423	L-Dup	1132	Air	9.55	0.003	0	0	<13.33	<0.0045
02/11/00	TTW-00424	M1	1002.7	Air	7.01	0.003	0	0	<11.43	<0.0044
02/11/00	TTW-00425	N	582.75	Air	7.64	0.005	0	0	<11.43	<0.0076
02/11/00	TTW-00426	J	1095.2	Air	8.92	0.003	***3	0	24	0.0084
02/11/00	TTW-00427	F	1058.75	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/11/00	TTW-00428	A	1095.2	Air	8.28	0.003	0	0	<13.33	<0.0047
02/11/00	TTW-00429	B	1095.2	Air	<7.0	<0.002	***13	***3	213.33	0.0750
02/11/00	TTW-00430	B-Dup	1065.6	Air	10.83	0.004	0	0	<13.33	<0.0048
02/11/00	TTW-00431	C	989.75	Air	14.01	0.005	***1	***1	22.86	0.0089
02/11/00	TTW-00432	D	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
02/11/00	TTW-00433	K	1017.9	Air	8.28	0.003	0	0	<11.43	<0.0043
02/11/00	TTW-00434	U	1068.38	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/11/00	TTW-00435	V	876.9	Air	<7.0	<0.003	***1	0	10	0.0044
02/11/00	TTW-00436	S	1098	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/11/00	TTW-00437	E	1047.6	Air	<7.0	<0.003	***1	0	13.33	0.0049
02/11/00	TTW-00438	W	1080	Air	15.92	0.006	***4	0	53.33	0.0190

No sample taken for Location Q due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 13, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	1	822	08:19	10	00:00:30	1	0.0	0.1	50.6	451.1
3	-74.198685	40.570054	D078	1	--	-----	10	00:00:30	1	0.0	0.1	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	992	08:14	10	00:00:30	1	0.0	0.1	9.1	290.4
6	-74.207406	40.563818	D079	1	988	08:23	10	00:00:30	1	0.0	0.1	6.1	310.4
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	1	970	08:00	10	00:00:30	1	0.0	0.1	24.2	712.7

NOTES:

No data was collected from DataRam Serial Number D078 at Perimeter Location 3 due to a malfunction of the Data Ram instrument.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 14, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2	2.0
Start Time	0625	0628	0623
Stop Time	1446	1448	1423
Run Time (minutes)	501	508	480
Maximum Concentration (ug/m^3)	128.35	35.58	105.50
Average Concentration (ug/m^3)	31.32	15.38	17.20

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday-Tuesday, February 16-19, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on February 19

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 18 samples taken in and around ground zero on February 12. All one samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for lower Manhattan to 6,049, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Staten Island Landfill:

Air (Particulates) - EPA used portable monitors to collect samples of particulates on February 14 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 15 and February 18 at Location "L" (northeast side of Stuyvesant High School); Location "N" (south side of Pier 25); and Location "R" (northwest side of Stuyvesant High School). Samples were also collected on February 16 at Location "L" and Location "R." All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted from February 14 through February 18 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from February 14 through February 18 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, February 19, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 12, 1200 - 2338 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 14) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Feb 14) - Particulate Monitoring (Dataram)

Errata: The particulate data submitted on the February 15 Sampling Situation Report was actually for Feb. 14. The report identified the results as being from Feb 13. The table itself was correctly dated.

NYC / ER (Feb 15) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8½ hours.
Station L had an average of 33.62 ug/m^3 with a maximum reading of 140.27 ug/m^3.
Station N had an average 19.51 ug/m^3 with a maximum reading of 72.29 ug/m^3.
Station R had an average 17.58 ug/m^3 with a maximum reading of 43.23 ug/m^3.

NYC / ER (Feb 16) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and R) were below the OSHA TWA.
Measurements were not taken at Location N due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station L had an average of 49.30 ug/m^3 with a maximum reading of 214.57 ug/m^3.
Station R had an average 36.55 ug/m^3 with a maximum reading of 65.65 ug/m^3.

NYC / ER (Feb 18) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 5.03 ug/m^3 with a maximum reading of 35.45 ug/m^3.
Station N had an average 3.54 ug/m^3 with a maximum reading of 41.51 ug/m^3.
Station R had an average 2.40 ug/m^3 with a maximum reading of 37.60 ug/m^3.

NYC / ER (Feb 14) - Volatile Organics (Mobile Laboratory)

Numerous compounds were identified above the detection limit (20 ppbv) at the South Tower in a ground level plume sample.
VOCs were not detected in any of the three other samples collected (Washing Tent, Austin Tobin Plaza, and North Tower).

NYC / ER (Feb 15) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Feb 16) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Feb 17) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Feb 18) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/12/02 1200 to 2338

Data Validation Date: 02/15/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/12/02	TTW-00457	L	1116.5	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/12/02	TTW-00458	M1	1094.4	Air	<7.0	<0.003	0	0	<13.12	<0.0046
02/12/02	TTW-00459	N	1182.6	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/12/02	TTW-00460	N-Dup	1037.85	Air	<7.0	<0.003	0	0	<13.12	<0.0049
02/12/02	TTW-00461	J	1130.4	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/12/02	TTW-00462	Q	1184.9	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/12/02	TTW-00463	Q-Dup	1107	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/12/02	TTW-00464	F	532.8	Air	<7.0	<0.005	0	0	<7.87	<0.0057
02/12/02	TTW-00465	A	496.8	Air	<7.0	<0.005	0	0	<7.87	<0.0061
02/12/02	TTW-00466	B	1065.6	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/12/02	TTW-00467	C	1076.4	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/12/02	TTW-00468	D	1117.8	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/12/02	TTW-00469	K	1103.4	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/12/02	TTW-00470	U	1214.5	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/12/02	TTW-00471	V	1221.5	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/12/02	TTW-00472	S	1159.2	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/12/02	TTW-00473	E	1099.8	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/12/02	TTW-00474	W	1087.2	Air	44.59	0.016	0	0	<13.12	<0.0046

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct) ,
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 14, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	1	1070	08:55	10	00:00:30	1	0.0	0.1	25.5	332.1
3	-74.198685	40.570054	D078	1	--	-----	10	00:00:30	1	0.0	0.1	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	1071	08:55	10	00:00:30	1	0.0	0.1	15.2	688.9
6	-74.207406	40.563818	D079	1	1073	08:56	10	00:00:30	1	0.0	0.1	13.8	708.5
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	1	638	05:19	10	00:00:30	1	0.0	0.1	18.0	374.8

NOTES:

No data was collected from DataRam Serial Number D078 at Perimeter Location 3 due to a malfunction of the Data Ram instrument.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 18, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0653	0657	0650
Stop Time	1455	1458	1453
Run Time (minutes)	482	481	483
Maximum Concentration (ug/m^3)	35.45	41.51	37.60
Average Concentration (ug/m^3)	5.03	3.54	2.40

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 16, 2002

Location	L	N*	R
DataRAM I.D. No.	D080	-	D074
Flow Rate (liters/minute)	2.0	-	2.0
Start Time	0645	-	0643
Stop Time	1452	-	1450
Run Time (minutes)	487	-	487
Maximum Concentration (ug/m^3)	214.57	-	65.65
Average Concentration (ug/m^3)	49.30	-	36.55

* equipment malfunction

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 15, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0623	0627	0621
Stop Time	1457	1500	1453
Run Time (minutes)	514	513	513
Maximum Concentration (ug/m^3)	140.27	72.29	43.23
Average Concentration (ug/m^3)	33.62	19.51	17.58

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/14/02

File Name	NYC1054	NYC1055	NYC1056	NYC1057	NYC1060	NYC1058
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			Plume
Sample Number			A07471	A07472	A07473	A07474
Sample Height			Breathing Level	Breathing Level	Breathing Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	**56**
Chlorodifluoromethane	RL	RL	RL	RL	RL	**54**
Dichlorodifluoromethane	RL	RL	RL	RL	RL	**93**
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	**75**
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	**58**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	**84**
MTBE	RL	RL	RL	RL	RL	**480**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	**43**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	**69**
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	**24**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	**31**
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/13/02

File Name	NYC1043	NYC1044	NYC1045	NYC1048	NYC1050	NYC1049
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			Plume
Sample Number			A07465	A07466	A07467	A07468
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/18/02

File Name	NYC1087	NYC1088	NYC1089	NYC1090	NYC1092	NYC1091
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07496	A07497	A07499	A07498
Sample Height			Breathing Level	Ground Level	Breathing Level	Breathing Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/17/02

File Name	NYC1079	NYC1080	NYC1081	NYC1082	NYC1084	NYC1083
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07492	A07493	A07494	A07495
Sample Height			Breathing Level	Ground Level	Breathing Level	Breathing Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/16/02

File Name	NYC1071	NYC1072	NYC1073	NYC1074	NYC1076	NYC1075
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07479	A07480	A07481	A07491
Sample Height			Breathing Level	Breathing Level	Breathing Level	Breathing Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/15/02

File Name	NYC1063	NYC1065	NYC1064	NYC1065	NYC1068	NYC1067
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07475	A07476	A07477	A07478
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, February 20, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:00 p.m. on February 20

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 48 samples taken in and around ground zero on February 13 and February 14. EPA also sampled for asbestos at two additional lower Manhattan locations on February 10 and February 11. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for lower Manhattan to 6,101, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx) and P.S. 44 (80 Maple Parkway, Staten Island) on February 10 and February 11. Samples were also collected at P.S. 274 (800 Bushwick Ave, Brooklyn) and P.S. 199 (3290 48th St., Queens) on February 11. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Fifty-six air samples collected from February 12 through February 14 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 19 at Location "L" (northeast side of Stuyvesant High School); Location "N" (south side of Pier 25); and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 19 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from February 19 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, February 20, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 13, 0001 - 1126 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations U and E) were not collected due to equipment malfunctions.

NYC / ER (Feb 13, 1200 - 2359 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location A) was not collected due to an equipment malfunction.

NYC / ER (Feb 14, 0001 - 1049 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
3 samples (Locations W, D, and K) were not collected due to equipment malfunctions.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 12, 0757 - 2235 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 13, 0745 - 2225 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 14, 0742 - 2000 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-8) was not collected due to an equipment malfunction.
Note: Low sample volume recorded.

Ambient Air Sampling Locations

NYC / ER (Feb 10 - 11) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)

- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 12 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
1 sample (Site 9) was not collected on Feb. 10 due to an equipment malfunction.
1 sample (Site 7) from Feb. 10 was not analyzed due to a wet filter.

NYC / ER (Feb 17) - Particulate Monitoring (Dataram)

Particulate level measurements were not collected at Locations L, N, and R due to the weather conditions.

NYC / ER (Feb 19) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 27.77 ug/m^3 with a maximum reading of 337.24 ug/m^3.
Station N had an average 21.29 ug/m^3 with a maximum reading of 233.60 ug/m^3.
Station R had an average 22.98 ug/m^3 with a maximum reading of 66.39 ug/m^3.

NYC / ER (Feb 19) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/13/02 0001 to 1126

Data Validation Date: 02/15/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/13/02	FB021302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/13/02	TB021302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/13/02	TTW-00475	L	999	Air	<7.0	<0.003	0	0	<11.25	<0.0043
02/13/02	TTW-00476	L-Dup	1056.6	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/13/02	TTW-00477	M1	1011.5	Air	<7.0	<0.003	0	0	<13.12	<0.0050
02/13/02	TTW-00478	N	1086.75	Air	<7.0	<0.003	***1	0	13.12	0.0046
02/13/02	TTW-00479	J	1058.75	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/13/02	TTW-00480	Q	1174.25	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/13/02	TTW-00481	F	1048.25	Air	<7.0	<0.003	***1	0	13.12	0.0048
02/13/02	TTW-00482	F-Dup	1072.75	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/13/02	TTW-00483	A	1200.5	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/13/02	TTW-00484	B	936	Air	<7.0	<0.003	0	0	<11.25	<0.0046
02/13/02	TTW-00485	C	1198.8	Air	<7.0	<0.002	0	0	<15.75	<0.0051
02/13/02	TTW-00486	D	1118.25	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/13/02	TTW-00487	K	1055.25	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/13/02	TTW-00488	V	1130.4	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/13/02	TTW-00489	S	1038.6	Air	<7.0	<0.003	0	0	<11.25	<0.0042
02/13/02	TTW-00490	W	1009.8	Air	48.41	0.019	0	0	<11.25	<0.0043

Samples locations U and E were not submitted due to pump fault.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volume (liters) are below recommer limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/17/02**
Sampling Date and Time: **2/13/02 1200 to 2359**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/13/02	TTW-00491	L	1096.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/13/02	TTW-00492	M1	1034.25	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/13/02	TTW-00493	N	1114.2	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/13/02	TTW-00494	J	1092.6	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/13/02	TTW-00495	J-Dup	1135.9	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/13/02	TTW-00496	Q	1254.6	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/13/02	TTW-00497	F	1188	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/13/02	TTW-00498	A-Dup	1115.55	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/13/02	TTW-00499	B	1177.75	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/13/02	TTW-00500	C	1017	Air	<7.0	<0.003	***1	***1	22.86	0.0087
02/13/02	TTW-00501	D	1121.4	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/13/02	TTW-00502	K	387	Air	<7.0	<0.007	0	0	<8.00	<0.0080
02/13/02	TTW-00503	U	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/13/02	TTW-00504	V	1254.75	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/13/02	TTW-00505	S	1099	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/13/02	TTW-00506	E	1105.2	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/13/02	TTW-00507	W	1080	Air	12.74	0.005	***1	***1	26.67	0.0095

No sample for location A due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/17/02**
Sampling Date and Time: **2/14/02 0001 to 1049**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/14/02	FB021402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/14/02	TB021402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/14/02	TTW-00508	L	1015.2	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/14/02	TTW-00509	M1	983.5	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/14/02	TTW-00510	N	1067.5	Air	<7.0	<0.003	0	0	<11.43	<0.0041
02/14/02	TTW-00511	J	994	Air	<7.0	<0.003	***1	0	11.43	0.0044
02/14/02	TTW-00512	Q	1166.4	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/14/02	TTW-00513	F	1062.25	Air	7.64	0.003	***1	0	13.33	0.0048
02/14/02	TTW-00514	A	1009.8	Air	8.28	0.003	***3	0	34.29	0.0131
02/14/02	TTW-00515	B	941.4	Air	<7.0	<0.003	***1	0	11.43	0.0047
02/14/02	TTW-00516	B-Dup	1089.65	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/14/02	TTW-00517	C	1127	Air	10.19	0.004	0	0	<13.33	<0.0046
02/14/02	TTW-00518	U	1036.8	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/14/02	TTW-00519	U-Dup	948.5	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/14/02	TTW-00520	V	1099	Air	<7.0	<0.002	0	0	<13.12	<0.0047
02/14/02	TTW-00521	S	1022	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/14/02	TTW-00522	E	1106	Air	<7.0	<0.002	0	0	<13.33	<0.0046

No sample was taken for Location W,D, and K due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
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I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
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R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/12/02 0757 to 2235

Data Validation Date: 02/15/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/12/02	LF02780	P-1	1174.25	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/12/02	LF02781	P-2	1396.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/12/02	LF02782	P-3	1197.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/12/02	LF02783	P-4	1224.38	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/12/02	LF02784	P-5	1316.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/12/02	LF02785	P-6	1126.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/12/02	LF02786	P-7	1352.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/12/02	LF02787	P-8	1274.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/12/02	LF02788	W-11	1146.00	Air	34.39	0.0012	***1	0	13.12	0.0044
02/12/02	LF02789	W-12A	1110.00	Air	42.04	0.015	***1	***1	26.25	0.0091
02/12/02	LF02790	W-12B	1102.50	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/12/02	LF02791	B-13	1302.00	Air	<7.0	<0.002	***2	0	31.50	0.0093
02/12/02	LF02792	B-14	1404.00	Air	<7.0	<0.002	***1	0	15.75	0.0043
02/12/02	LF02793	T-15	1440.00	Air	19.11	0.005	***1	0	15.75	0.0042
02/12/02	LF02794	T-16	1440.00	Air	15.29	0.004	0	0	<15.75	<0.0042
02/12/02	LF02795	O-17	1362.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/12/02	LF02796	O-18	1287.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/12/02	LF02797	O-19	1244.00	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/12/02	LF02798	MPHS-20	1338.75	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/12/02	LF02799	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/12/02	LF02800	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-12-02rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/13/02 0745 to 2225

Data Validation Date: 02/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/13/02	LF02801	P-1	1359.15	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/13/02	LF02802	P-2	1384.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/13/02	LF02803	P-3	1350.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/13/02	LF02804	P-4	1304.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/13/02	LF02805	P-5	1300.65	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/13/02	LF02806	P-6	1148.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/13/02	LF02807	P-7	1170.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/13/02	LF02808	P-8	1149.75	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/13/02	LF02809	W-11	1318.20	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/13/02	LF02810	W-12A	1378.00	Air	<7.0	<0.002	0	***1	15.75	0.0044
02/13/02	LF02811	W-12B	1141.88	Air	7.64	0.003	***1	***2	39.37	0.0133
02/13/02	LF02812	B-13	1434.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/13/02	LF02813	B-14	1135.70	Air	NA (1)	NA (1)	***1	0.00	13.12	0.0044
02/13/02	LF02814	T-15	1440.00	Air	<7.0	<0.002	***1	***1	31.50	0.0084
02/13/02	LF02815	T-16	1260.00	Air	19.11	0.006	0	0	<15.75	<0.0048
02/13/02	LF02816	O-17	1349.40	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/13/02	LF02817	O-18	1246.00	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/13/02	LF02818	O-19	1372.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/13/02	LF02819	MPHS-20	1234.35	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/13/02	LF02820	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/13/02	LF02821	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-13-02rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/14/02 0742 to 2000

Data Validation Date: 02/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/14/02	LF02822	P-1	1268.00	Air	<7.0	<0.002	***1	0	15.75	0.0048
02/14/02	LF02823	P-2	1435.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/14/02	LF02824	P-3	6.15	Air	<7.0	<0.438	0	0	<7.87	<0.4929
02/14/02	LF02825	P-4	1330.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/14/02	LF02826	P-5	1201.20	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/14/02	LF02827	P-6	1050.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/14/02	LF02828	P-7	1290.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/14/02	LF02830	W-11	1394.00	Air	26.75	0.007	***1	0	15.75	0.0043
02/14/02	LF02831	W-12A	1117.25	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/14/02	LF02832	W-12B	1191.45	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/14/02	LF02833	B-13	1269.20	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/14/02	LF02834	B-14	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/14/02	LF02835	T-15	1440.00	Air	7.64	0.002	0	0	<15.75	<0.0042
02/14/02	LF02836	T-16	1440.00	Air	11.46	0.003	0	0	<15.75	<0.0042
02/14/02	LF02837	O-17	1230.60	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/14/02	LF02838	O-18	1315.60	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/14/02	LF02839	O-19	1360.80	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/14/02	LF02840	MPHS-20	1260.60	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/14/02	LF02841	P-1D	1363.25	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/14/02	LF02842	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/14/02	LF02843	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No sample taken for LF02829 due to pump fault

Key:

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*** Chrysotile

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-14-02rev1.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/15/02**
Sampling Date and Time: 2/10/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/10/02	7093-18-0136	Park Row	1144	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/10/02	7093-19-0136	Chambers Street	900	Air	<7.0	<0.003	0	0	<11.25	<0.0048
02/10/02	7093-15-0134	I.S. 143	1110	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/10/02	7094-09-0124	P.S. 154 (Bronx)	1304	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/10/02	7095-98-0130	P.S. 274(Brooklyn)	1080	Air	NS	NS	NS	NS	NS	NS
02/10/02	7097-18-0127	P.S. 44 (S.I)	1208	Air	<7.0	<0.002	0	0	<13.12	<0.0042

Sample for location P.S. 199 (Queens) was not submitted due to pump fault
Sample # 7095-98-0130 was voided because the filter was wet.

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/15/02**
Sampling Date and Time: 2/11/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/11/02	7093-18-0137	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/11/02	7093-19-0137	Chambers Street	1238	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/11/02	7093-15-0135	I.S. 143	1330	Air	<7.0	<0.002	0	0	<16.00	<0.0046
02/11/02	7094-09-0125	P.S. 154 (Bronx)	1290	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/11/02	7096-12-0131	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/11/02	7095-98-0131	P.S. 274(Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/11/02	7097-18-0128	P.S. 44 (S.I)	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045

Key:
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United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 19, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0639	0642	0637
Stop Time	1451	1502	1449
Run Time (minutes)	492	500	492
Maximum Concentration (ug/m^3)	337.24	233.60	66.39
Average Concentration (ug/m^3)	27.77	21.29	22.98

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/19/02

File Name	NYC1095	NYC1096	NYC1097	NYC1098	NYC1100	NYC1099
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07500	A07501	A07503	A07502
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, February 21, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:45 p.m. on February 21

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 67 samples taken in and around ground zero from February 14 through February 16. EPA also sampled for asbestos at two additional lower Manhattan locations on February 12 and February 13. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for lower Manhattan to 6,172, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island) on February 12 and February 13. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Twenty air samples collected on February 15 were analyzed for asbestos. A sample taken at one of the Wash Tents (Location W-11) showed 78.7 structures per square

millimeter, which exceeds the AHERA school re-entry standard. All other samples were below the school re-entry standard.

Air (Particulates) - EPA used portable monitors to collect samples of particulates on February 15, 19 and 20 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 20 at Location "L" (northeast side of Stuyvesant High School); Location "N" (south side of Pier 25); and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 20 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from February 20 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the South Tower debris pile, and the North Tower debris pile showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, February 21, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 14, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 15, 0001 - 1045 hrs)

All 13 samples analyzed were below the TEM AHERA standard.
5 samples (Locations A, N, S, K-duplicate, and U) were not analyzed due to equipment malfunctions.

NYC / ER (Feb 15, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 16, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 14, 0742 - 2000 hrs)

Resubmittal: Previously stated in Feb. 20 Sampling Situation Report that all 18 samples analyzed were below the TEM AHERA standard. Should have actually read that all 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 15, 0730 - 2226 hrs)

1 of 20 samples was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location W-11 (78.74 S/mm^2).

Fresh Kills (Feb 15) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-5, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Feb 16 - 17) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Fresh Kills (Feb 18) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to equipment malfunctions.

Fresh Kills (Feb 19) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-5, and P-6) based on daily average concentrations.

Fresh Kills (Feb 20) - Particulate Monitoring (Dataram)

Nothing of significance reported at two stations (P-5 and P-6) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Feb 12 - 13) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 20) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 52.34 ug/m^3 with a maximum reading of 131.82 ug/m^3.
Station N had an average 54.55 ug/m^3 with a maximum reading of 239.11 ug/m^3.
Station R had an average 54.48 ug/m^3 with a maximum reading of 85.35 ug/m^3.

NYC / ER (Feb 20) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/17/02**
Sampling Date and Time: **2/14/02 1200 to 2400**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S-f/cc**
02/14/02	TTW-00523	L	1127	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/14/02	TTW-00524	M1	1020.25	Air	8.92	0.003	***1	0	11.43	0.0043
02/14/02	TTW-00525	N	1043	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/14/02	TTW-00526	J	1169	Air	10.19	0.003	***1	0	13.33	0.0044
02/14/02	TTW-00527	Q	1048.25	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/14/02	TTW-00528	F	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
02/14/02	TTW-00529	A	1141.2	Air	14.65	0.005	0	0	<13.33	<0.0045
02/14/02	TTW-00530	B	1146.6	Air	11.46	0.004	0	0	<13.33	<0.0045
02/14/02	TTW-00531	C	1096.2	Air	7.64	0.003	0	0	<13.33	<0.0047
02/14/02	TTW-00532	D	1179	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/14/02	TTW-00533	K	1204.2	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/14/02	TTW-00534	U	1039.3	Air	7.64	0.003	0	0	<13.33	<0.0049
02/14/02	TTW-00535	U-Dup	1063.8	Air	8.28	0.003	0	0	<13.33	<0.0048
02/14/02	TTW-00536	V	1126.8	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/14/02	TTW-00537	S	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/14/02	TTW-00538	E	1200.6	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/14/02	TTW-00539	E-Dup	1096.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/14/02	TTW-00540	W	1193.4	Air	7.64	0.003	0	0	<13.33	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (filers) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-14-02-pmrev1.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/15/02 0001 to 1045

Data Validation Date: 02/17/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/15/02	FB021502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/15/02	TB021502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/15/02	TTW-00541	L	962.5	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/15/02	TTW-00542	M1	1085	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/15/02	TTW-00543	J	1032.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/15/02	TTW-00544	J-Dup	968.4	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/15/02	TTW-00545	Q	1045	Air	11.46	0.004	0	0	<11.43	<0.0042
02/15/02	TTW-00546	F	1105.2	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/15/02	TTW-00547	B	928.8	Air	7.64	0.003	0	0	<11.43	<0.0047
02/15/02	TTW-00548	C	1155.6	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/15/02	TTW-00549	D	1161	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/15/02	TTW-00550	K	1132.2	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/15/02	TTW-00551	V	991.8	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/15/02	TTW-00552	E	1015	Air	7.64	0.003	0	0	<11.43	<0.0043
02/15/02	TTW-00553	W	1002.6	Air	<7.0	<0.003	0	***1	11.43	0.0044

No sample was taken for Locations N,A,S, K-Dup and U due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/15/02 1200 to 2400

Data Validation Date: 02/18/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
02/15/02	TTW-00554	L	1287	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/15/02	TTW-00555	M1	1213.8	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/15/02	TTW-00556	N	1180.8	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/15/02	TTW-00557	J	1139.4	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/15/02	TTW-00558	J-Dup	1132.2	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/15/02	TTW-00559	Q	1254.6	Air	7.01	0.002	0	0	<16.00	<0.0049
02/15/02	TTW-00560	F	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/15/02	TTW-00561	A	1161	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/15/02	TTW-00562	B	1287	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/15/02	TTW-00563	C	1130.4	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/15/02	TTW-00564	D	1060.2	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/15/02	TTW-00565	D-Dup	1278	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/15/02	TTW-00566	K	1141.2	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/15/02	TTW-00567	U	1229.4	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/15/02	TTW-00568	V	1247.4	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/15/02	TTW-00569	S	1085.4	Air	7.01	0.003	0	0	<13.33	<0.0047
02/15/02	TTW-00570	E	1281.6	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/15/02	TTW-00571	W	1096.2	Air	7.64	0.003	0	0	<13.33	<0.0047

Sampling Locations:
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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
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R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/18/02**
Sampling Date and Time: **2/16/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/16/02	FB021602	Field Blank	0	Air	NS		NS	NS		
02/16/02	TB021602	Trip Blank	0	Air	NS		NS	NS		
02/16/02	TTW-00572	L	968.4	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/16/02	TTW-00573	M1	1051.2	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/16/02	TTW-00574	N	981	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/16/02	TTW-00575	J	1166.4	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/16/02	TTW-00576	J-Dup	1060.2	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/16/02	TTW-00577	Q	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/16/02	TTW-00578	F	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/16/02	TTW-00579	A	1058.4	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/16/02	TTW-00580	B	990	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/16/02	TTW-00581	C	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/16/02	TTW-00582	C-Dup	1038.6	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/16/02	TTW-00583	D	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/16/02	TTW-00584	K	217.8	Air	<7.0	<0.012	0	0	<8.00	<0.0141
02/16/02	TTW-00585	U	1096.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/16/02	TTW-00586	V	1197	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/16/02	TTW-00587	S	1112.4	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/16/02	TTW-00588	E	1144.8	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/16/02	TTW-00589	W	1150.2	Air	<7.0	<0.002	0	0	<13.33	<0.0045

Sampling Locations:
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R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
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V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected

NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-02-16-02-amrev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/15/02 0730 to 2226

Data Validation Date: 02/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/15/02	LF02845	P-1	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/15/02	LF02846	P-2	1440.00	Air	10.19	0.003	0	0	<15.75	<0.0042
02/15/02	LF02847	P-3	1000.00	Air	<7.0	<0.002	0	0	<15.75	<0.0061
02/15/02	LF02848	P-4	1440.00	Air	<7.0	<0.002	***1	0	15.75	0.0042
02/15/02	LF02849	P-5	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/15/02	LF02850	P-6	1199.25	Air	8.92	0.003	0	0	<13.12	<0.0042
02/15/02	LF02851	P-7	1378.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/15/02	LF02852	P-8	1418.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/15/02	LF02853	W-11	1372.00	Air	34.39	0.010	***3	***2	78.74	0.0221
02/15/02	LF02854	W-12A	1357.20	Air	11.46	0.003	0	0	<15.75	<0.0045
02/15/02	LF02855	W-12B	1187.55	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/15/02	LF02856	B-13	1476.00	Air	7.64	0.002	0	0	<15.75	<0.0041
02/15/02	LF02857	B-14	1414.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/15/02	LF02858	T-15	1476.00	Air	14.01	0.004	0	0	<15.75	<0.0041
02/15/02	LF02859	T-16	1728.00	Air	17.83	0.004	0	0	<19.69	<0.0044
02/15/02	LF02860	O-17	1532.70	Air	<7.0	<0.002	0	0	<19.69	<0.0049
02/15/02	LF02861	O-18	1327.95	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/15/02	LF02862	O-19	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/15/02	LF02863	MPHS-20	1353.30	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/15/02	LF02864	P-1D	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/15/02	LF02865	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/15/02	LF02866	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (filers) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-15-02rev1.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/18/02**
Sampling Date and Time: 2/12/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/12/02	7093-18-0138	Park Row	1174	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/12/02	7093-19-0138	Chambers Street	1254	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/12/02	7093-15-0136	I.S. 143	1216	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/12/02	7094-09-0126	P.S. 154 (Bronx)	1380	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/12/02	7096-12-0132	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/12/02	7095-98-0132	P.S. 274(Brooklyn)	1082	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/12/02	7097-18-0129	P.S. 44 (S.I)	1116	Air	<7.0	<0.002	0	0	<13.33	<0.0046

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-02-12-02rev1.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/18/02**
Sampling Date and Time: 2/13/02 1200 to 2325

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/13/02	7093-18-0139	Park Row	1190	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/13/02	7093-19-0139	Chambers Street	1146	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/13/02	7093-15-0137	I.S. 143	1370	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/13/02	7094-09-0127	P.S. 154 (Bronx)	1300	Air	<7.0	<0.002	0	0	<16.00	<0.0047
02/13/02	7096-12-0133	P.S. 199 (Queens)	1164	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/13/02	7095-98-0133	P.S. 274(Brooklyn)	1294	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/13/02	7097-18-0130	P.S. 44 (S.I)	1356	Air	<7.0	<0.002	0	0	<16.00	<0.0045

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 15 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	1	964	08:02	10	00:00:30	1	0.0	0.1	8.5	448.7
3	-74.198685	40.570054	D078	1	--	-----	10	00:00:30	1	0.0	0.1	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	964	08:02	10	00:00:30	1	0.0	0.1	15.5	209.5
6	-74.207406	40.563818	D079	1	965	08:03	10	00:00:30	1	0.0	0.1	13.9	783.3
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	1	957	09:58	10	00:00:30	1	0.0	0.1	15.32	1247.9

NOTES:

No data was collected from DataRam Serial Number D078 at Perimeter Location P3.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 19 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	1	369	03:05	10	00:00:30	1	0.0	0.1	49.3	1328.3
3	-74.198685	40.570054	D078	1	--	-----	10	00:00:30	1	0.0	0.1	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	1057	08:49	10	00:00:30	1	0.0	0.1	16.8	1372.1
6	-74.207406	40.563818	D079	1	1059	08:50	10	00:00:30	1	0.0	0.1	15.9	2490.9
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	1	--	-----	10	00:00:30	1	0.0	0.1	----	----

NOTES:

No data was collected from DataRam Serial Number D078 at Perimeter Location P3 and D077 at Location P8.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 20, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	1	--	-----	10	00:00:30	1	0.0	0.1	----	----
3	-74.198685	40.570054	D078	1	--	-----	10	00:00:30	1	0.0	0.1	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	1160	09:40	10	00:00:30	1	0.0	0.1	51.5	1030.8
6	-74.207406	40.563818	D079	1	1165	09:42	10	00:00:30	1	0.0	0.1	48.2	1131.2
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	1	--	-----	10	00:00:30	1	0.0	0.1	----	----

NOTES:

No data was collected from DataRam Serial Number D078 at Perimeter Location P3 and D077 at Location P8.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 20, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0648	0647	0643
Stop Time	1452	1452	1448
Run Time (minutes)	482	485	485
Maximum Concentration (ug/m^3)	131.82	239.11	85.35
Average Concentration (ug/m^3)	52.34	54.55	54.48

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/20/02

File Name	NYC1103	NYC1104	NYC1105	NYC1106	NYC1108	NYC1107
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07504	A07505	A07507	A07506
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, February 22, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on February 22

Staten Island Landfill:

Air (Asbestos) - Twenty air samples collected on February 16 were analyzed for asbestos. A sample taken at one of the Wash Tents (Location W-11) showed 78.7 structures per square millimeter, which exceeds the AHERA school re-entry standard. All other samples were below the school re-entry standard.

Metals - A total of 10 samples were collected on January 22 and January 29. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 21 at Location "L" (northeast side of Stuyvesant High School); Location "N" (south side of Pier 25); and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from December 18 through December 23, from December 25 through December 31, on January 3, from January 8 through January 12, and on January 20, 22 and 24 at a location on Park Row in Lower Manhattan. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted on December 20 and 21, from December 23 through December 31, on January 3, on January 8 and 9, on January 11 and 12, and from January 20 through January 24 at Chambers & West Streets in Lower Manhattan. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was

conducted from December 24 through December 31, on January 3, from January 8 through January 12, from January 20 through January 22, and on January 24 at a location on Albany Street in Lower Manhattan. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted on December 18, from December 20 through December 23, from December 26 through January 2, and on January 4 and January 5 at Public School 274 (800 Bushwick Avenue, Brooklyn). All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from December 18 through December 23 at the Coast Guard Building (Battery Park) in Lower Manhattan. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Dioxin - A total of 6 samples were collected from January 28 to February 4 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

PAHs - A total of 20 samples were collected on January 8 and January 10 at various locations in Lower Manhattan. PAHs were not detected.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 21 in the direct area of the excavation area at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 21 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North and South Tower excavation areas showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, February 22, 2002

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 16, 0705 - 2114 hrs)

1 of 20 samples was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location W-11 (78.74 S/mm^2).

Fresh Kills (Jan 22) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills (Jan 29) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills (Feb 21) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Ambient Air Sampling Locations

NYC / ER (Jan 28 - Feb 4) - Dioxin (EPA-ORD)

Six (6) 72-hour samples were collected during this period at Park Row (2 samples), Chambers St./West St. (2 samples), and Albany St. (2 samples) at roof top locations.
None of the samples collected were above the EPA Removal Action guidelines (based on a 30-year exposure).
Note: The analytical results for all of these samples indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.
Data is not attached.

NYC / ER (Jan 8) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Jan 10) - PAHs

All 10 samples analyzed did not detect any PAHs

NYC / ER (Dec 18) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***17.5 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***12.1 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***11.0 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 19) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***40.1 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***21.2 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 20) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***44.7 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***29.2 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***20.7 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***21.0 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 21) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***25.0 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***22.7 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***11.8 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***11.3 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 22) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***17.4 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***52.4 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***5.3 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 23) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***30.4 ug/m³***.
Chambers St./West St. (Site 2) - 24-hr average concentration for this period was ***46.6 ug/m³***.
Coast Guard Building - Battery Park (Site 3) - 24-hour average concentration for this period was ***33.0 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***3.9 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 24) - Particulate Monitoring (PM_{10} filter)

Chambers St./West St. (Site 2) - 24-hr average concentration for this period was ***25.0 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***24.8 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 25) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hr average concentration for this period was ***17.4 ug/m³***.
Chambers St./West St. (Site 2) - 24-hr average concentration for this period was ***20.5 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***22.8 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 26) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***24.6 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***37.9 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***31.4 ug/m³***.

P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***23.8 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 27) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***43.1 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***44.0 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***34.2 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***22.2 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 28) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***40.9 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***46.3 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***30.5 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***21.0 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 29) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***40.8 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***29.2 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***22.9 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***18.0 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 30) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***38.1 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***20.0 ug/m³***.

Albany St. - 24-hr average concentration for this period was ***32.5 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***16.6 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Dec 31) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***41.1 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***25.7 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***44.5 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***21.3 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 1) - Particulate Monitoring (PM_{10} filter)

P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***17.1 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 2) - Particulate Monitoring (PM_{10} filter)

P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***20.0 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 3) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***33.8 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***44.9 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***27.0 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 4) - Particulate Monitoring (PM_{10} filter)

P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***24.9 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150

ug/m^3).

NYC / ER (Jan 5) - Particulate Monitoring (PM_{10} filter)

P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***25.2 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 8) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***28.5 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***26.6 ug/m^3***.
Albany St. - 24-hr average concentration for this period was ***12.5 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 9) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***31.8 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***33.0 ug/m^3***.
Albany St. - 24-hr average concentration for this period was ***24.5 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 10) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***39.9 ug/m^3***.
Albany St. - 24-hr average concentration for this period was ***34.5 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 11) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***31.7 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***42.1 ug/m^3***.
Albany St. - 24-hr average concentration for this period was ***30.4 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 12) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***28.3 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***28.2 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***18.6 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 20) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***29.6 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***27.4 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***26.7 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 21) - Particulate Monitoring (PM_{10} filter)

Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***43.3 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***36.9 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 22) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***37.8 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***29.0 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***30.4 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 23) - Particulate Monitoring (PM_{10} filter)

Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***31.7 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Jan 24) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***28.5 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***30.0 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***23.1 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 21) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 68.16 ug/m^3 with a maximum reading of 177.65 ug/m^3.
Station N had an average 68.69 ug/m^3 with a maximum reading of 209.0 ug/m^3.
Station R had an average 60.09 ug/m^3 with a maximum reading of 149.21 ug/m^3.

NYC / ER (Feb 21) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Bulk Sampling

NYC / ER (Jan 23) - Asbestos

1 bulk sample collected from the roof of a trailer near Warren St./West St. contained less than 1% chrysotile asbestos.
3 bulk samples collected from Pier 6 did not detect any asbestos.
Data not attached electronically.

Water Sampling

NYC / ER (Jan 10)

2 samples collected of ponded water from the base of the excavation at Ground Zero.
Analytical parameters included: metals (cadmium, copper, lead, mercury, nickel, zinc), PCBs, volatile organics, total petroleum hydrocarbons, hexavalent chromium, flashpoint, total suspended solids, temperature, and pH.
PCBs were not detected.
Volatile organics (max. values): benzene (2.9 ug/l), toluene (27 ug/l), tetrachloroethene (3.9 ug/l), ethylbenzene (8.2 ug/l), m/p xylenes (21 ug/l),

o-xylenes (12 ug/l), naphthalene (10 ug/l), methyl tert-butyl ether (170 ug/l).
Metals (max. values): cadmium (ND), copper (40.4J ug/l), lead (40.5 ug/l), mercury (0.61 ug/l), nickel (14.9B ug/l), zinc (135 ug/l).
Hexavalent chromium (max. value): 0.05 ug/l.
pH (maximum value): 11.7
Data not attached electronically.

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/16/02 0705 to 2114

Data Validation Date: 02/19/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/16/02	LF2867	P-1	1246.05	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/16/02	LF2868	P-2	55.10	Air	<7.0	<0.049	0	0	<7.87	<0.0050
02/16/02	LF2869	P-3	1380.60	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/16/02	LF2870	P-4	1324.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/16/02	LF2871	P-5	1.60	Air	<7.0	<1.683	0	0	<7.87	<1.8947
02/16/02	LF2872	P-6	1196.00	Air	<7.0	<0.002	0	0	<15.75	<0.0051
02/16/02	LF2873	P-7	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/16/02	LF2874	P-8	1388.40	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/16/02	LF2875	W-11	1132.80	Air	104.46	0.036	***6	0	78.74	0.0268
02/16/02	LF2876	W-12A	1310.40	Air	59.87	0.018	***1	0	15.75	0.0046
02/16/02	LF2877	W-12B	1290.90	Air	44.59	0.013	0	0	<15.75	<0.0047
02/16/02	LF2878	B-13	1260.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/16/02	LF2879	B-14	1382.55	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/16/02	LF2880	T-15	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/16/02	LF2881	T-16	1440.00	Air	28.03	0.007	0	0	<15.75	<0.0042
02/16/02	LF2882	O-17	1428.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/16/02	LF2883	O-18	1239.90	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/16/02	LF2884	O-19	1336.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/16/02	LF2885	MPHS-20	1390.35	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/16/02	LF2886	P-1D	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/16/02	LF2887	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/16/02	LF2888	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-16-02rev1.xls

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0083		WTC-0084		WTC-0078	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		646	
Date Collected		-		-		-		01/29/02		01/29/02		01/29/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.9
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.077
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.077
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.19
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.077
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.19
Calcium	ICAP	7.0	2.5	3.7	2.5	3.6	2.5	U	2.5	U	2.5	U	3.9
Chromium	ICAP	1.7	0.13	0.75	0.13	0.86	0.13	U	0.13	U	0.13	U	0.19
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.39
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.39
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	U	0.97
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.077
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	19
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.19
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.39
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	77
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.077
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.19
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	19
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.077
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.39
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.39

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0079		WTC-0080		WTC-0081		WTC-0082	
Location		P-8		O-17		O-18		O-19	
Air Volume (L)		4690		3730		4940		5220	
Date Collected		01/29/02		01/29/02		01/29/02		01/29/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.89	0.27	U	0.34	0.79	0.25	0.42	0.24
Antimony	AA-Fur	U	0.011	U	0.013	U	0.01	U	0.0096
Arsenic	AA-Fur	U	0.011	U	0.013	U	0.01	U	0.0096
Barium	ICAP	0.041	0.027	U	0.034	0.10	0.025	0.03	0.024
Beryllium	ICAP	U	0.011	U	0.013	U	0.01	U	0.0096
Cadmium	ICAP	U	0.027	U	0.034	U	0.025	U	0.024
Calcium	ICAP	3.4	0.53	0.73	0.67	3.0	0.51	1.9	0.48
Chromium	ICAP	U	0.027	U	0.034	U	0.025	U	0.024
Cobalt	ICAP	U	0.053	U	0.067	U	0.051	U	0.048
Copper	ICAP	U	0.053	U	0.067	0.066	0.051	U	0.048
Iron	ICAP	1.7	0.13	0.75	0.17	2.3	0.13	0.94	0.12
Lead	AA-Fur	0.044	0.011	U	0.013	0.053	0.01	0.02	0.0096
Magnesium	ICAP	U	2.7	U	3.4	U	2.5	U	2.4
Manganese	ICAP	0.039	0.027	U	0.034	0.04	0.025	U	0.024
Nickel	ICAP	U	0.053	U	0.067	U	0.051	U	0.048
Potassium	ICAP	U	11	U	13	U	10	U	9.6
Selenium	AA-Fur	U	0.011	U	0.013	U	0.01	U	0.0096
Silver	ICAP	U	0.027	U	0.034	U	0.025	U	0.024
Sodium	ICAP	U	2.7	U	3.4	U	2.5	U	2.4
Thallium	AA-Fur	U	0.011	U	0.013	U	0.01	U	0.0096
Vanadium	ICAP	U	0.053	U	0.067	U	0.051	U	0.048
Zinc	ICAP	0.12	0.053	0.079	0.067	0.18	0.051	0.081	0.048

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0076		WTC-0077		WTC-0071	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		4830	
Date Collected		-		-		-		01/22/02		01/22/02		01/22/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.26
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Calcium	ICAP	3.9	2.5	3.6	2.5	3.9	2.5	U	2.5	U	2.5	U	0.52
Chromium	ICAP	0.65	0.13	0.75	0.13	0.70	0.13	0.30	0.13	U	0.13	U	0.026
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	U	0.13
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0072		WTC-0073		WTC-0074		WTC-0075	
Location		P-8		O-17		O-18		O-19	
Air Volume (L)		3800		3970		5350		5350	
Date Collected		01/22/02		01/22/02		01/22/02		01/22/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.33	U	0.31	0.42	0.23	U	0.23
Antimony	AA-Fur	U	0.013	U	0.013	U	0.0093	U	0.0093
Arsenic	AA-Fur	U	0.013	U	0.013	U	0.0093	U	0.0093
Barium	ICAP	U	0.033	U	0.031	0.065	0.023	U	0.023
Beryllium	ICAP	U	0.013	U	0.013	U	0.0093	U	0.0093
Cadmium	ICAP	U	0.033	U	0.031	U	0.023	U	0.023
Calcium	ICAP	U	0.66	0.88	0.63	2.2	0.47	0.55	0.47
Chromium	ICAP	U	0.033	U	0.031	U	0.023	U	0.023
Cobalt	ICAP	U	0.066	U	0.063	U	0.047	U	0.047
Copper	ICAP	U	0.066	U	0.063	0.049	0.047	U	0.047
Iron	ICAP	U	0.16	0.47	0.16	1.4	0.12	0.29	0.12
Lead	AA-Fur	U	0.013	U	0.013	0.022	0.0093	U	0.0093
Magnesium	ICAP	U	3.3	U	3.1	U	2.3	U	2.3
Manganese	ICAP	U	0.033	U	0.031	U	0.023	U	0.023
Nickel	ICAP	U	0.066	U	0.063	U	0.047	U	0.047
Potassium	ICAP	U	13	U	13	U	9.3	U	9.3
Selenium	AA-Fur	U	0.013	U	0.013	U	0.0093	U	0.0093
Silver	ICAP	U	0.033	U	0.031	U	0.023	U	0.023
Sodium	ICAP	U	3.3	U	3.1	4.0	2.3	U	2.3
Thallium	AA-Fur	U	0.013	U	0.013	U	0.0093	U	0.0093
Vanadium	ICAP	U	0.066	U	0.063	U	0.047	U	0.047
Zinc	ICAP	U	0.066	U	0.063	0.10	0.047	0.067	0.047

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for PAH in Air
WA # 0-0236: NYC ER Site

Date Sampled 1/10/02				
Sample No.	06134		06135	
Sampling Location	E-Liberty St & South End Ave		Field Blank	
Volume (L)	468		0	
	Conc.	MDL	Conc.	MDL
Compound Name	ppbv	ppbv	µg	µg
Naphthalene	U	4.4	U	11
2-Methylnaphthalene	U	4.2	U	11
1-Methylnaphthalene	U	4.0	U	11
Biphenyl	U	3.8	U	11
2,6-Dimethylnaphthalene	U	3.8	U	12
Acenaphthylene	U	4.0	U	12
Acenaphthene	U	3.6	U	11
Dibenzofuran	U	3.5	U	11
Fluorene	U	3.5	U	11
Phenanthrene	U	3.2	U	11
Anthracene	U	3.2	U	11
Carbazole	U	3.7	U	12
Fluoranthene	U	2.9	U	12
Pyrene	U	2.9	U	11
Benzo(a)anthracene	U	2.5	U	11
Chrysene	U	2.3	U	10
Benzo(b)fluoranthene	U	2.3	U	11
Benzo(k)fluoranthene	U	2.5	U	12
Benzo(e)pyrene	U	2.3	U	11
Benzo(a)pyrene	U	2.6	U	13
Indeno(1,2,3-cd)pyrene	U	2.7	U	14
Dibenzo(a,h)anthracene	U	2.6	U	14
Benzo(g,h,i)perylene	U	2.4	U	13

COC 04391
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

ERTC 2/19/02

1-8&10-02PAH.xls

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 21, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0641	0644	0645
Stop Time	1443	1445	1441
Run Time (minutes)	482	481	476
Maximum Concentration (ug/m^3)	177.65	209.0	149.21
Average Concentration (ug/m^3)	68.16	68.69	60.09

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/21/02

File Name	NYC1111	NYC1112	NYC1113	NYC1114	NYC1116	NYC1115
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07508	A07509	A07510	A07511
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday-Monday, February 23-25, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on February 25

Staten Island Landfill:

Air (Particulates) - EPA used portable monitors to collect samples of particulates on February 23 and February 24 at the Staten Island Landfill. There were no significant readings.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples from February 22 through February 24 at Location "L" (northeast side of Stuyvesant High School) and Location "N" (south side of Pier 25). Samples were also collected at Location "R" (northwest side of Stuyvesant High School) on February 23. All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 23 and February 24 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 23 and February 24 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, the North and South Tower excavation areas, and in front of the Banker's Trust Building, showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, February 25, 2002

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 23) - Particulate Monitoring (Dataram)

Nothing of significance reported at two stations (P-5 and P-6) based on daily average concentrations.

Fresh Kills (Feb 24) - Particulate Monitoring (Dataram)

Nothing of significance reported at one station (P-6) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Feb 22) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
Particulate monitoring was not conducted at Location R due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station L had an average of 14.84 ug/m^3 with a maximum reading of 70.31 ug/m^3.
Station N had an average 11.10 ug/m^3 with a maximum reading of 49.86 ug/m^3.

NYC / ER (Feb 23) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 13.81 ug/m^3 with a maximum reading of 84.43 ug/m^3.
Station N had an average 10.65 ug/m^3 with a maximum reading of 23.33 ug/m^3.
Station R had an average 11.64 ug/m^3 with a maximum reading of 40.79 ug/m^3.

NYC / ER (Feb 24) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
Particulate monitoring was not conducted at Location R due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station L had an average of 16.22 ug/m^3 with a maximum reading of 74.52 ug/m^3.
Station N had an average 13.76 ug/m^3 with a maximum reading of 25.53 ug/m^3.

NYC / ER (Feb 22) - Volatile Organics (Mobile Laboratory)

No monitoring conducted due to equipment malfunction.

NYC / ER (Feb 23) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the five samples collected (Washing Tent, Austin Tobin Plaza, North Tower, South Tower, and Bankers Trust).
Note: The sample taken in front of Banker's Trust was a ground level sample at the western edge of the hole.

NYC / ER (Feb 24) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the five samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and Northeast Area [B-3 level]).

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 24, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	N/a	--	--	N/a	N/a	N/a	N/a	N/a	N/a	N/a
3	-74.198685	40.570054	D078	N/a	--	-----	N/a	N/a	N/a	N/a	N/a	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	--	--	--	00:00:30	1	0.0	0.1	--	--
6	-74.207406	40.563818	D079	1	967	08:03	10	00:00:30	1	0.0	0.1	16.4	418.6
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	N/a	--	-----	N/a	N/a	N/a	N/a	N/a	----	----

NOTES:

Data was collected only from DataRam Serial Number D079 at Perimeter Location P6.
DataRam Serial Number D076 at Location P2 was failed and no data was collected.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 23, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	N/a	--	--	N/a	N/a	N/a	N/a	N/a	N/a	N/a
3	-74.198685	40.570054	D078	N/a	--	-----	N/a	N/a	N/a	N/a	N/a	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	910	07:35	10	00:00:30	1	0.0	0.1	15.4	143.7
6	-74.207406	40.563818	D079	1	970	08:05	10	00:00:30	1	0.0	0.1	10.2	146.0
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	N/a	--	-----	N/a	N/a	N/a	N/a	N/a	----	----

NOTES:

Data was collected from DataRam Serial Number D076 at Perimeter Location P2 and D079 at Location P6.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 24, 2002

Location	L	N	R*
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	-
Start Time	0637	0639	-
Stop Time	1440	1443	-
Run Time (minutes)	483	484	-
Maximum Concentration (ug/m^3)	74.52	25.53	-
Average Concentration (ug/m^3)	16.22	13.76	-

* equipment malfunction

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 23, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0707	0710	0705
Stop Time	1507	1509	1504
Run Time (minutes)	480	479	479
Maximum Concentration (ug/m^3)	84.43	23.33	40.79
Average Concentration (ug/m^3)	13.81	10.65	11.64

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 22, 2002

Location	**L**	**N**	**R***
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	-
Start Time	0632	0635	-
Stop Time	1422	1425	-
Run Time (minutes)	470	470	-
Maximum Concentration (ug/m^3)	70.31	49.86	-
Average Concentration (ug/m^3)	14.84	11.10	-

* equipment malfunction

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/24/02

File Name	NYC1137	NYC1138	NYC1139	NYC1140	NYC1141	NYC1142
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	NE B-3
			Ambient Air			
Sample Number			A07521	A07522	A07523	A07524
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/23/02

File Name	NYC1128	NYC1129	NYC1130	NYC1131	NYC1133	NYC1132	NYC1134
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower	South Tower	Bankers Trust
Sample Number			A07516	A07517	A07518	A07519	A07520
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, February 26, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 2:45 p.m. on February 26

Staten Island Landfill:

Air (Particulates) - EPA used portable monitors to collect samples of particulates on February 22 and February 25 at the Staten Island Landfill. There were no significant readings.

Metals - A total of 5 samples were collected on February 6. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 25 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from February 9 through February 17 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from February 9 through February 17 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Dioxin - A total of 26 samples were collected from February 4 through February 11 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Metals - A total of 8 samples were collected on January 15 at several locations in Lower Manhattan. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 25 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 25 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, February 26, 2002

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 6) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills (Feb 22) - Particulate Monitoring (Dataram)

Nothing of significance reported at two stations (P-5 and P-6) based on daily average concentrations.

Fresh Kills (Feb 25) - Particulate Monitoring (Dataram)

Nothing of significance reported at two stations (P-5 and P-6) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Feb 4 - 11) - Dioxin (EPA-ORD)

Six (6) 72-hour samples were collected during this period at Park Row (2 samples), Chambers St./West St. (2 samples), and Albany St. (2 samples) at roof top locations.
None of the samples collected were above the EPA Removal Action guideline (based on a 30-year exposure).
Note: The analytical results for all of these samples indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.
Data is not attached.

NYC / ER (Feb 5) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Feb 8) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 15) - Metals

8 samples collected.
2 samples (Locations D and P) were not collected due to pumps being knocked over from high winds.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Feb 9) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***10.26 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.24 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***11.22 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Feb 9) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***20.61 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 10) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***7.07 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***7.19 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***7.37 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Feb 10) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***20.67 ug/m³***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 11) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***5.87 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***8.35 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***8.12 ug/m³***. All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Feb 11) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***18.14 ug/m³***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 12) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***10.07 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.52 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.66 ug/m³***. All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Feb 12) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***23.99 ug/m³***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 13) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***8.68 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.02 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.35 ug/m³***. All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Feb 13) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***23.88 ug/m³***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 14) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.20 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.88 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***12.47 ug/m³***. All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 14) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***26.79 ug/m³***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 15) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***10.39 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.65 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***12.17 ug/m³***. All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 15) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***24.41 ug/m³***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 16) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***15.86 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***17.33 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***14.93 ug/m³***. All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65

ug/m^3).

NYC / ER (Feb 16) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***24.57 ug/m^3***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 17) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***7.85 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.00 ug/m^3***.
Wall Street - 24-hour average concentrations for this period was ***9.14 ug/m^3***. All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Feb 17) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***19.13 ug/m^3***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 25) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8½ hours.
Station L had an average of 44.37 ug/m^3 with a maximum reading of 220.21 ug/m^3.
Station N had an average 28.61 ug/m^3 with a maximum reading of 62.80 ug/m^3.
Station R had an average 31.04 ug/m^3 with a maximum reading of 91.35 ug/m^3.

NYC / ER (Feb 25) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the five samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/08/02

Sample No.	WG7097-1			06413			06414			06415			06416			06417		
Sampling Location	Method Blank			R- TAGA			A-Barclay & West Broadway			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			7056			6465			6855			6045			5730		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0028	U		0.0031	U		0.0029	U		0.0033	U		0.0035
12378-PeCDD	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
123478-HxCDD	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
123678-HxCDD	U		0.10	U		0.014	U		0.015	U	0.0010	0.015	U		0.017	U		0.017
123789-HxCDD	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
1234678-HpCDD	U		0.10	U	0.0006	0.014	U		0.015	U	0.0010	0.015	U		0.017	U	0.0010	0.017
OCDD	0.0161 J		0.20	0.0033 J		0.028	0.0035 J		0.031	0.0033 J		0.029	U		0.033	U	0.0039	0.035
2378-TCDF	U		0.020	U		0.0028	U		0.0031	U		0.0029	U		0.0033	U		0.0035
12378-PeCDF	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
23478-PeCDF	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
123478-HxCDF	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
123678-HxCDF	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
234678-HxCDF	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
123789-HxCDF	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
1234678-HpCDF	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
1234789-HpCDF	U		0.10	U		0.014	U		0.015	U		0.015	U		0.017	U		0.017
OCDF	U		0.20	U		0.028	U		0.031	U		0.035	U		0.033	U		0.035
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0412			0.0014			0.0016			0.0017			0.0030			0.0021		

COC# 02/08/02 dioxin

B= Not detected due to blank contamination

EMPC: Estimated Maximum Possible Concentration

TEQ: Toxicity Equivalent

ERTC 2/22/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/08/02

Sample No.	06418			06419			06420			06421			06422			06423			06424		
Sampling Location	D Greenwich & Albany St.			Location S			Location S			Location P			Location E			Field Blank			Lot Blank		
Volume (Liters)	5535			6165			7440			7840			5880			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0036	U		0.0032	U		0.0027	U		0.0026	U		0.0034	U		0.020	U		0.020
12378-PeCDD	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
123478-HxCDD	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
123678-HxCDD	U		0.018	U	0.0013	0.016	U		0.013	U		0.013	U		0.017	U		0.10	0.0067 J		0.10
123789-HxCDD	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
1234678-HpCDD	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	0.0006 J		0.10	U		0.10
OCDD	U		0.036	U	0.0029	0.032	U		0.027	.0017 J		0.026	U		0.0034	U	0.0242	0.20	U	0.0110	0.20
2378-TCDF	U		0.0036	U		0.0032	U		0.0027	U		0.0026	U		0.0034	U		0.020	U		0.020
12378-PeCDF	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
23478-PeCDF	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
123478-HxCDF	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
123678-HxCDF	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
234678-HxCDF	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
123789-HxCDF	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
1234678-HpCDF	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
1234789-HpCDF	U		0.018	U		0.016	U		0.013	U		0.013	U		0.017	U		0.10	U		0.10
OCDF	U		0.036	U		0.032	U		0.027	U		0.026	U		0.0034	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			0.0067		
Total HpCDDs	U			U			U			U			U			0.0060			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0001			0.0007		
TEQ (ND=1/2)	0.0033			0.0018			0.0014			0.0016			0.0017			0.0393			0.0388		

COC# 02/08/02 dioxin

Table 1.1 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0090		WTC-0091		WTC-0085	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		4970	
Date Collected		-		-		-		02/06/02		02/06/02		02/06/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.25
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Calcium	ICAP	4.1	2.5	4.0	2.5	4.6	2.5	U	2.5	U	2.5	U	0.50
Chromium	ICAP	0.82	0.13	0.81	0.13	0.82	0.13	U	0.13	0.16	0.13	U	0.025
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Iron	ICAP	0.92	0.63	U	0.63	U	0.63	U	0.63	U	0.63	U	0.13
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.5
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Nickel	ICAP	U	0.25	0.31	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.025
Sodium	ICAP	14	13	U	13	U	13	U	13	U	13	U	2.5
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.05
Zinc	ICAP	0.28	0.25	0.28	0.25	0.27	0.25	U	0.25	U	0.25	U	0.05

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0086		WTC-0087		WTC-0088		WTC-0089	
Location		P-8		O-17		O-18		O-19	
Air Volume (L)		3600		2830		4800		4450	
Date Collected		02/06/02		02/06/02		02/06/02		02/06/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	2.5	0.35	U	0.44	U	0.26	U	0.28
Antimony	AA-Fur	U	0.014	U	0.018	U	0.01	U	0.011
Arsenic	AA-Fur	U	0.014	U	0.018	U	0.01	U	0.011
Barium	ICAP	0.047	0.035	U	0.044	0.029	0.026	U	0.028
Beryllium	ICAP	U	0.014	U	0.018	U	0.01	U	0.011
Cadmium	ICAP	U	0.035	U	0.044	U	0.026	U	0.028
Calcium	ICAP	14	0.69	U	0.88	1.2	0.52	0.57	0.56
Chromium	ICAP	U	0.035	U	0.044	U	0.026	U	0.028
Cobalt	ICAP	U	0.069	U	0.088	U	0.052	U	0.056
Copper	ICAP	0.12	0.069	U	0.088	U	0.052	U	0.056
Iron	ICAP	4.4	0.17	0.51	0.22	0.76	0.13	0.40	0.14
Lead	AA-Fur	0.11	0.014	U	0.018	0.021	0.01	0.013	0.011
Magnesium	ICAP	U	3.5	U	4.4	U	2.6	U	2.8
Manganese	ICAP	0.10	0.035	U	0.044	U	0.026	U	0.028
Nickel	ICAP	U	0.069	U	0.088	U	0.052	U	0.056
Potassium	ICAP	U	14	U	18	U	10	U	11
Selenium	AA-Fur	U	0.014	U	0.018	U	0.01	U	0.011
Silver	ICAP	U	0.035	U	0.044	U	0.026	U	0.028
Sodium	ICAP	U	3.5	U	4.4	U	2.6	U	2.8
Thallium	AA-Fur	U	0.014	U	0.018	U	0.01	U	0.011
Vanadium	ICAP	U	0.069	U	0.088	U	0.052	U	0.056
Zinc	ICAP	0.23	0.069	U	0.088	0.093	0.052	U	0.056

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/05/02

Sample No.	WG7092-1			06401			06402			06403			06404			06405		
Sampling Location	Method Blank			R- TAGA			A-Barclay & West Broadway			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			5625			6120			5640			6858.75			5865		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0036	U		0.0033	U		0.0035	U		0.0029	U		0.0034
12378-PeCDD	U		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
123478-HxCDD	U		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
123678-HxCDD	0.0092 J		0.10	U		0.018	U	0.0018	0.016	U	0.0017	0.018	U		0.015	U		0.017
123789-HxCDD	U		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
1234678-HpCDD	0.0045 J		0.10	U		0.018	U	0.0009	0.016	U		0.018	U	0.0010	0.015	U		0.017
OCDD	U	0.0160	0.20	U	0.0029	0.036	U	0.0043	0.033	U		0.035	U		0.029	U		0.034
2378-TCDF	U		0.020	U		0.0036	U		0.0033	U		0.0035	U		0.0029	U		0.0034
12378-PeCDF	0.0026 J		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
23478-PeCDF	U		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
123478-HxCDF	U		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
123678-HxCDF	U	0.0030	0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
234678-HxCDF	U		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
123789-HxCDF	U		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
1234678-HpCDF	U	0.0029	0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
1234789-HpCDF	U		0.10	U		0.018	U		0.016	U		0.018	U		0.015	U		0.017
OCDF	U		0.20	U		0.036	U		0.033	U		0.035	U		0.029	U		0.034
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	0.0092			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	0.0045			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	0.0026			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0011			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0380			0.0015			0.0013			0.0015			0.0015			0.0015		

COC# 02/05/02 dioxin

B= Not detected due to blank contamination

EMPC: Estimated Maximum Possible Concentration

TEQ: Toxicity Equivalent

ERTC 2/21/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/05/02

Sample No.	06406			06407			06408			06409			06410			06411			06412		
Sampling Location	D Greenwich & Albany St.			Location S			Location S			Location P			Location E			Field Blank			Lot Blank		
Volume (Liters)	6750			3435			5145			5610			5085			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0030	U		0.0058	U		0.0039	U		0.0036	U		0.0039	U		0.020	U		0.020
12378-PeCDD	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
123478-HxCDD	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
123678-HxCDD	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	0.0120 J		0.10
123789-HxCDD	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
1234678-HpCDD	0.0007 J		0.015	0.0014 J		0.029	0.0009 J		0.019	0.0013 J		0.018	0.0011 J		0.020	U	0.0661	0.10	U		0.10
OCDD	U		0.030	U		0.058	U		0.039	U		0.036	U	0.0042	0.0039	U		0.20	0.0146 J		0.20
2378-TCDF	U		0.0030	U		0.0058	U		0.0039	U		0.0036	U		0.0039	U		0.020	U		0.020
12378-PeCDF	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
23478-PeCDF	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
123478-HxCDF	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
123678-HxCDF	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
234678-HxCDF	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
123789-HxCDF	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
1234678-HpCDF	U	0.0005	0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
1234789-HpCDF	U		0.015	U		0.029	U		0.019	U		0.018	U		0.020	U		0.10	U		0.10
OCDF	U		0.030	U		0.058	U		0.039	U		0.036	U		0.0039	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			0.0120		
Total HpCDDs	0.0007			0.0014			0.0009			0.0013			0.0011			0.0058			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0012		
TEQ (ND=1/2)	0.0011			0.0019			0.0019			0.0014			0.0015			0.0396			0.0399		

COC# 02/05/02 dioxin

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06173		06174		06163		06164		06165		06166	
Location		Field Blank		Lot Blank		R(TAGA)		A-BARCLAY ST. & WEST BROADWAY		LOC 3A BTWN LOTC 4 + 5		B-CHURCH & DEY ST.	
		0											
Air Volume (L)						4800		4320		4840		4840	
Date Collected		01/15/02		01/15/02		01/15/02		01/15/02		01/15/02		01/15/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.64	0.60	1.2	0.60	0.13	0.10	2.3	0.10	1.5	0.12	1.0	0.12
Antimony	ICAP	0.09	0.08	0.36	0.08	U	0.02	U	0.02	U	0.02	U	0.02
Arsenic	AA-Fur	U	0.03	U	0.03	U	0.007	U	0.008	U	0.007	U	0.007
Barium	ICAP	U	0.32	U	0.32	U	0.10	0.11	0.07	0.09	0.07	0.096	0.07
Beryllium	ICAP	U	0.05	U	0.05	U	0.01	U	0.01	U	0.01	U	0.01
Cadmium	ICAP	U	0.02	U	0.02	U	0.003	U	0.004	U	0.003	U	0.003
Calcium	ICAP	4.9	3.5	4.3	3.5	1.7	0.70	23	0.81	22	0.70	12	0.70
Chromium	ICAP	1.2	0.04	0.73	0.04	0.02	0.01	U	0.01	0.03	0.009	0.02	0.009
Cobalt	ICAP	U	0.03	U	0.03	U	0.007	0.01	0.01	0.01	0.007	U	0.007
Copper	ICAP	U	0.44	U	0.44	U	0.092	0.18	0.10	0.15	0.09	0.14	0.09
Iron	ICAP	U	0.90	U	0.90	1.4	0.19	9.3	0.21	6.9	0.19	5.6	0.19
Lead	AA-Fur	0.02	0.009	U	0.009	0.02	0.002	0.15	0.002	0.14	0.002	0.07	0.002
Magnesium	ICAP	U	3.3	U	3.3	U	0.69	5.4	0.80	3.2	0.70	2.6	0.70
Manganese	ICAP	U	0.08	U	0.08	0.019	0.016	0.16	0.02	0.10	0.02	0.08	0.02
Nickel	ICAP	U	0.06	U	0.06	0.08	0.01	0.10	0.01	0.08	0.01	0.08	0.01
Potassium	ICAP	U	3.7	U	3.7	U	0.77	U	0.85	U	0.76	U	0.76
Selenium	AA-Fur	U J	0.08	U J	0.08	U J	0.02	U J	0.02	U J	0.02	U	0.015
Silver	ICAP	0.04	0.03	0.05	0.03	U	0.01	U	0.006	U	0.005	U	0.005
Sodium	ICAP	138	3.7	144	3.7	U	0.77	U	0.85	U	0.76	U	0.80
Thallium	ICAP	U	0.07	U	0.07	U	0.013	U	0.02	U	0.01	U	0.011
Vanadium	ICAP	U	0.04	0.08	0.04	U	0.01	0.02	0.01	0.01	0.008	0.008	0.008
Zinc	ICAP	0.08	0.08	0.09	0.08	U	0.02	U	0.02	U	0.02	U	0.02

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
J denotes the value has been qualified as estimated.
Average Lot Blank and Field Blank concentrations were subtracted from all sample results

Table 1.0 (cont) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06167		06168		06171		06172	
Location		B-CHURCH & DEY ST.		C-LIBERTY ST. & CHURCH ST.		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		4730		5020		4260		3750	
Date Collected		1/15/02		01/15/02		01/15/02		01/15/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.76	0.007	0.88	0.10	0.35	0.14	0.51	0.16
Antimony	ICAP	U	0.02	U	0.02	U	0.02	U	0.02
Arsenic	AA-Fur	U	0.007	U	0.006	U	0.008	U	0.009
Barium	ICAP	0.093	0.067	0.067	0.10	0.08	0.07	0.03	0.08
Beryllium	ICAP	U	0.011	U	0.01	U	0.01	U	0.01
Cadmium	ICAP	U	0.003	U	0.003	U	0.004	U	0.004
Calcium	ICAP	8.3	0.74	9.7	0.70	3.2	0.82	5.1	0.93
Chromium	ICAP	U	0.009	U	0.01	U	0.01	U	0.01
Cobalt	ICAP	0.01	0.007	0.01	0.01	0.01	0.008	0.01	0.009
Copper	ICAP	0.11	0.094	0.12	0.09	U	0.10	U	0.12
Iron	ICAP	4.7	0.19	6.8	0.18	2.4	0.21	2.3	0.24
Lead	AA-Fur	0.07	0.002	0.06	0.002	0.03	0.002	0.04	0.003
Magnesium	ICAP	1.7	0.70	1.7	0.70	1.1	0.78	1.4	0.88
Manganese	ICAP	0.07	0.02	0.10	0.02	0.03	0.02	0.03	0.02
Nickel	ICAP	0.08	0.012	0.08	0.10	0.08	0.01	0.09	0.02
Potassium	ICAP	U	0.78	U	0.73	U	0.86	U	0.98
Selenium	AA-Fur	U J	0.016	U J	0.02	U J	0.02	U J	0.02
Silver	ICAP	U	0.005	U	0.005	U	0.006	U	0.007
Sodium	ICAP	U	0.78	U	0.73	U	0.86	U	0.98
Thallium	ICAP	U	0.01	U	0.01	U	0.015	U	0.02
Vanadium	ICAP	0.009	0.008	U	0.01	U	0.009	U	0.01
Zinc	ICAP	U	0.017	U	0.02	U	0.02	U	0.02

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Lot Blank and Field Blank concentrations were subtracted from all sample results

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 22, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	1	--	----	10	00:00:30	1	0.0	0.1	----	----
3	-74.198685	40.570054	D078	1	--	-----	10	00:00:30	1	0.0	0.1	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	999	08:20	10	00:00:30	1	0.0	0.1	11.4	110.6
6	-74.207406	40.563818	D079	1	998	08:19	10	00:00:30	1	0.0	0.1	10.0	100.6
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	1	--	-----	10	00:00:30	1	0.0	0.1	----	----

NOTES:

No data was collected from DataRam Serial Number D075 at Perimeter Location 2, D078 Perimeter Location 3 and D077 Perimeter Location 8 due to a malfunction of the Data Ram instrument.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
February 25, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (sec)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D075	1	--	----	10	00:00:30	1	0.0	0.1	----	----
3	-74.198685	40.570054	D078	1	--	-----	10	00:00:30	1	0.0	0.1	----	----
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D076	1	960	08:00	10	00:00:30	1	0.0	0.1	27.4	168.4
6	-74.207406	40.563818	D079	1	961	08:01	10	00:00:30	1	0.0	0.1	38.2	559.6
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D077	1	--	-----	10	00:00:30	1	0.0	0.1	----	----

NOTES:

No data was collected from DataRam Serial Number D075 at Perimeter Location 2, D078 Perimeter Location 3 and D077 Perimeter Location 8 due to a malfunction of the Data Ram instrument.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 25, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0645	0648	0642
Stop Time	1509	1511	1507
Run Time (minutes)	504	503	505
Maximum Concentration (ug/m^3)	220.21	62.80	91.35
Average Concentration (ug/m^3)	44.37	28.61	31.04

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/25/02

File Name	NYC1145	NYC1146	NYC1147	NYC1148	NYC1150	NYC1149
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07525	A07526	A07528	A07527
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, February 27, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:00 p.m. on February 27

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 26 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 26 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 26 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, February 27, 2002

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 26 - 27) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Ambient Air Sampling Locations

NYC / ER (Feb 26) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 68.16 ug/m^3 with a maximum reading of 98.77 ug/m^3.
Station N had an average 61.18 ug/m^3 with a maximum reading of 97.51 ug/m^3.
Station R had an average 69.05 ug/m^3 with a maximum reading of 233.41 ug/m^3.

NYC / ER (Feb 26) - Volatile Organics (Mobile Laboratory)

Aside from two compounds detected at the North Tower, no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Bulk/Soil Sampling

NYC / ER (Dec 19)

5 soil/bulk samples collected from the excavation area at Ground Zero.
Analytical parameters included: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides/PCBs, dioxin, metals (including mercury), and cyanide.
1 of the 5 samples contained total PCBs (2.28 ppm) above the EPA residential cleanup guideline of 1 ppm.
The same sample also contained a benzo(a)pyrene equivalent concentration (25.1 ppm) above the EPA Removal Action guidance levels (based on a 30-year exposure) represented as Toxic Equivalency Factors (TEFs) for benzo(a)pyrene.
The sample was below the adjusted EPA Removal Action guidance levels (based on a 1-year exposure) represented as TEFs for benzo(a)pyrene.
All other analytical parameters were either not detected or below applicable EPA Removal Action guidance levels.
Data is not attached.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 26, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0636	0640	0634
Stop Time	1444	1450	1439
Run Time (minutes)	488	490	485
Maximum Concentration (ug/m^3)	98.77	97.51	233.41
Average Concentration (ug/m^3)	68.16	61.18	69.05

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/26/02

File Name	NYC1153	NYC1154	NYC1155	NYC1156	NYC1158	NYC1157
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07529	A07531	A07532	A07530
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**48**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**25**	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, February 28, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on February 28

Ambient Air Samples:

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 27 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 27 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas showed no detectable levels of VOCs.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, February 28, 2002

Ambient Air Sampling Locations

NYC / ER (Feb 27) - Particulate Monitoring (Dataram)

Particulate measurements were not taken at Stations L, N, and R due to the weather conditions.

NYC / ER (Feb 27) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/27/02

File Name	NYC1161	NYC1162	NYC1163	NYC1164	NYC1166	NYC1165
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07533	A07534	A07536	A07535
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday-Monday, March 1-4, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:15 p.m. on March 4

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 102 samples taken in and around ground zero from February 16 through February 19. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for lower Manhattan to 6,274, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside lower Manhattan:

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on February 28 and March 1 in the direct area of the debris pile at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on February 28 and March 1 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the South Tower and North Tower excavation areas showed no detectable levels of VOC's.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, March 4, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 16, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
Data is not attached (will be included in a future report).

NYC / ER (Feb 17, 0001 - 1144 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location J) was not analyzed due to an equipment malfunction.
Data is not attached (will be included in a future report).

NYC / ER (Feb 17, 1200 - 2253 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 18, 0001 - 0952 hrs)

All 14 samples analyzed were below the TEM AHERA standard.
3 samples (Locations L, J, and F) were not analyzed due to equipment malfunctions.
1 sample (Location C) was not analyzed since the pump was tampered with.

NYC / ER (Feb 18, 1200 - 2247 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 19, 0001 - 1049 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (LocationW) was not analyzed since the pump was tampered with.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 28 - March 4) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Ambient Air Sampling Locations

NYC / ER (Feb 28) - Particulate Monitoring (Dataram)

Particulate measurements were not taken at Stations L, N, and R due to the

weather conditions.

NYC / ER (Feb 28) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 1) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/20/02**
Sampling Date and Time: 2/17/02 1200 to 2253

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/17/02	TTW-00625	L	1064	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/17/02	TTW-00626	M1	1089	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/17/02	TTW-00627	M1-Dup	1098.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/17/02	TTW-00628	N	1054.5	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/17/02	TTW-00629	J	1173.6	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/17/02	TTW-00630	Q	1096.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/17/02	TTW-00631	F	1165.5	Air	7.01	0.002	0	0	<13.33	<0.0044
02/17/02	TTW-00632	A	1054.5	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/17/02	TTW-00633	B	1204.35	Air	11.46	0.004	0	0	<13.33	<0.0043
02/17/02	TTW-00634	C	1163.65	Air	8.92	0.003	1***	0	13.33	0.0044
02/17/02	TTW-00635	D	1069.20	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/17/02	TTW-00636	K	1122.95	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/17/02	TTW-00637	K-Dup	1193.25	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/17/02	TTW-00638	U	1175.4	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/17/02	TTW-00639	V	1078	Air	<7.0	<0.002	1***	0	13.33	0.0048
02/17/02	TTW-00640	S	1098.9	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/17/02	TTW-00641	E	1048.95	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/17/02	TTW-00642	W	1173.6	Air	<7.0	<0.002	0	0	<13.33	<0.0044

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/21/2002**
Sampling Date and Time: 2/18/02 0001 to 0952

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/18/02	FB021802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/18/02	TB021802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/18/02	TTW-00643	L-Dup	969.4	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/18/02	TTW-00644	M1	1035	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/18/02	TTW-00645	N	1009.75	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/18/02	TTW-00646	J-Dup	972	Air	7.64	0.003	0	0	<11.43	<0.0045
02/18/02	TTW-00647	Q	1035	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/18/02	TTW-00648	A	921.3	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/18/02	TTW-00649	B	1048.95	Air	12.74	0.005	0	0	<13.33	<0.0049
02/18/02	TTW-00650	D	1042.2	Air	<7.0	<0.003	1***	0	13.33	0.0049
02/18/02	TTW-00651	K	1078.55	Air	<7.0	<0.002	0	0	<13.33	<0.0048
02/18/02	TTW-00652	U	1035	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/18/02	TTW-00653	V	1044	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/18/02	TTW-00654	S	919.8	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/18/02	TTW-00655	E	964.8	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/18/02	TTW-00656	W	1036	Air	<7.0	<0.003	0	0	<11.43	<0.0042

No sample was submitted for Locations L, J , F, and C due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/21/02**
Sampling Date and Time: 2/18/02 1200 to 2247

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/18/02	TTW-00657	L	1150.20	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/18/02	TTW-00658	M1	1038.60	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/18/02	TTW-00659	N	1072.80	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/18/02	TTW-00660	N-Dup	1102.00	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/18/02	TTW-00661	J	1073.00	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/18/02	TTW-00662	Q	1011.60	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/18/02	TTW-00663	F	997.50	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/18/02	TTW-00664	F-Dup	1111.50	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/18/02	TTW-00665	A	1126.65	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/18/02	TTW-00666	C	516.60	Air	<7.0	<0.005	0	0	<8.00	<0.0060
02/18/02	TTW-00667	B	1164.60	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/18/02	TTW-00668	D	1107.00	Air	7.01	0.002	0	0	<13.33	<0.0046
02/18/02	TTW-00669	K	1105.20	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/18/02	TTW-00670	U	943.20	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/18/02	TTW-00671	V	1015.20	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/18/02	TTW-00672	S	1042.20	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/18/02	TTW-00673	E	1087.20	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/18/02	TTW-00674	W	1040.40	Air	22.29	0.008	1***	0	11.43	0.0042

Sampling Locations:
A: NE corner of West Broadway & Barclay
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D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/21/2002**
Sampling Date and Time: **2/19/02 0001 to 1049**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
02/19/02	FB021902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/19/02	TB021902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/19/02	TTW-00675	L	999.00	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/19/02	TTW-00676	M1	919.80	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/19/02	TTW-00677	N	876.60	Air	<7.0	<0.003	0	0	<11.43	<0.0050
02/19/02	TTW-00678	J	937.80	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/19/02	TTW-00679	Q	1013.25	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/19/02	TTW-00680	F	1026.00	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/19/02	TTW-00681	A	1047.60	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/19/02	TTW-00682	A-Dup	1002.70	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/19/02	TTW-00683	C	1152.00	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/19/02	TTW-00684	B-	911.75	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/19/02	TTW-00685	D	1083.60	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/19/02	TTW-00686	K	1103.30	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/19/02	TTW-00687	U	975.60	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/19/02	TTW-00688	V	1041.25	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/19/02	TTW-00689	V-Dup	1015.20	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/19/02	TTW-00690	S	897.75	Air	<7.0	<0.003	0	0	<11.43	<0.0049
02/19/02	TTW-00691	E	980.00	Air	<7.0	<0.003	0	0	<11.43	<0.0045

No sample was submitted for Location W due to pump being tampered with

Sampling Locations:
A: NE corner of West Broadway & Barclay
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
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E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
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NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/01/02

File Name	NYC1177	NYC1178	NYC1179	NYC1180	NYC1182	NYC1181
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower	South Tower
Sample Number			A07541	A07542	A07543	A07544
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 02/28/02

File Name	NYC1169	NYC1170	NYC1171	NYC1172	NYC1174	NYC1173
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07537	A07538	A07539	A07540
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, March 5, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:30 p.m. on March 5

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 190 samples taken in and around ground zero from February 19 through February 25. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for lower Manhattan to 6,464, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Staten Island Landfill:

Air (Asbestos) - Fifty-eight air samples collected on February 17, February 21 and February 22 were analyzed for asbestos. All samples were below the school re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, March 5, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 16, 1200 - 2400 hrs)

Previously omitted data from March 4 Sampling Situation Report is attached.
All data remains the same.

NYC / ER (Feb 17, 0001 - 1144 hrs)

Previously omitted data from March 4 Sampling Situation Report is attached.
All data remains the same.

NYC / ER (Feb 19, 1200 - 2340 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 20, 0001 - 1122 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 20, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 21, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 21, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 22, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location F) was not analyzed due to an equipment malfunction.

NYC / ER (Feb 22, 1200 - 2334 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location F) was not analyzed due to an equipment malfunction.

NYC / ER (Feb 23, 0001 - 1200 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
2 samples (Locations F and C) were not analyzed due to equipment malfunctions.
1 sample (Location W) was not analyzed since the pump was tampered with.

NYC / ER (Feb 23, 1200 - 2041 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location K) was not analyzed due to an equipment malfunction.

NYC / ER (Feb 24, 0001 - 1200 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations E and C) were not analyzed due to equipment malfunctions.

NYC / ER (Feb 24)

Results pending.

NYC / ER (Feb 25, 0001 - 1135 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 17, 0710 - 2117 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
1 sample (Location B-14) was not analyzed due to overloading of particulates.

Fresh Kills (Feb 18)

Results pending.

Fresh Kills (Feb 19)

Results pending.

Fresh Kills (Feb 20)

Results pending.

Fresh Kills (Feb 21, 0746 - 2230 hrs)

All 20 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 22, 0724 - 2119 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
1 sample (Location B-13) was not analyzed due to an equipment malfunction.

Fresh Kills (Feb 23)

Results pending.

Fresh Kills (Feb 24)

Results pending.

Fresh Kills (March 5) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/19/02**
Sampling Date and Time: **2/16/02 1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
02/16/02	TTW-00590	L	1084.6	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/16/02	TTW-00591	L-Dup	1006	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/16/02	TTW-00592	M1	1107	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/16/02	TTW-00593	N	1188.3	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/16/02	TTW-00594	J	1203.6	Air	7.01	0.002	0	0	<13.33	<0.0043
02/16/02	TTW-00595	Q	1167.9	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/16/02	TTW-00596	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/16/02	TTW-00597	A	1211.4	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/16/02	TTW-00598	B	1120.3	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/16/02	TTW-00599	B-Dup	1126.8	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/16/02	TTW-00600	C	1071	Air	10.19	0.004	0	0	<13.33	<0.0048
02/16/02	TTW-00601	D	1137.5	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/16/02	TTW-00602	K	1260	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/16/02	TTW-00603	U	1095.5	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/16/02	TTW-00604	V	1202.4	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/16/02	TTW-00605	S	1114.75	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/16/02	TTW-00606	E	1174.7	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/16/02	TTW-00607	W	963.9	Air	8.92	0.004	0	0	<11.43	<0.0046

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/19/02**
Sampling Date and Time: **2/17/02 0001 to 1144**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/17/02	FB021702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/17/02	TB021702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/17/02	TTW-00608	L	1074.6	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/17/02	TTW-00609	M1	1069.3	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/17/02	TTW-00610	N	992.25	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/17/02	TTW-00611	N-Dup	1188.25	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/17/02	TTW-00612	Q	1117.8	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/17/02	TTW-00613	F	1072.7	Air	8.28	0.003	0	0	<13.33	<0.0048
02/17/02	TTW-00614	A	1149.75	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/17/02	TTW-00615	B	939.75	Air	<7.0	<0.003	0	*****1	11.43	0.0047
02/17/02	TTW-00616	C	1179.5	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/17/02	TTW-00617	D	1196.8	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/17/02	TTW-00618	D-Dup	1051.75	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/17/02	TTW-00619	K	1053.5	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/17/02	TTW-00620	U	945	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/17/02	TTW-00621	V	1123.7	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/17/02	TTW-00622	S	1000.8	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/17/02	TTW-00623	E	1046.5	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/17/02	TTW-00624	W	990.5	Air	7.64	0.003	0	***1	11.43	0.0044

No sample was submitted for Location J due to pump fault

Sampling Locations:
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barday & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/19/02 1200 to 2340

Data Validation Date: 02/22/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/19/02	TTW-00692	L	1260.00	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/19/02	TTW-00693	M1	1050.60	Air	8.92	0.003	0	0	<13.33	<0.0049
02/19/02	TTW-00694	N	1085.00	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/19/02	TTW-00695	J	1098.00	Air	10.19	0.004	0	0	<13.33	<0.0047
02/19/02	TTW-00696	Q	1119.60	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/19/02	TTW-00697	Q-Dup	1032.30	Air	12.74	0.005	0	0	<11.43	<0.0043
02/19/02	TTW-00698	F	1047.60	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/19/02	TTW-00699	A	1107.00	Air	16.56	0.006	0	0	<13.33	<0.0046
02/19/02	TTW-00700	B	1184.75	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/19/02	TTW-00701	B-Dup	1146.60	Air	7.64	0.003	0	0	<13.33	<0.0045
02/19/02	TTW-00702	C	1188.00	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/19/02	TTW-00703	D	1090.80	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/19/02	TTW-00704	K	1180.80	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/19/02	TTW-00705	U	1126.65	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/19/02	TTW-00706	V	1215.45	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/19/02	TTW-00707	S	1135.80	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/19/02	TTW-00708	E	1163.75	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/19/02	TTW-00709	W	1065.90	Air	11.46	0.004	0	0	<13.33	<0.00048

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Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-02-19-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/22/2002**
Sampling Date and Time: 2/20/02 0001 to 1122

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/20/02	FB022002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/20/02	TB022002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/20/02	TTW-00710	L	924.00	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/20/02	TTW-00711	M1	1047.60	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/20/02	TTW-00712	N	962.00	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/20/02	TTW-00713	J	1052.65	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/20/02	TTW-00714	Q	1037.85	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/20/02	TTW-00715	F	987.00	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/20/02	TTW-00716	A	973.80	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/20/02	TTW-00717	B	920.50	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/20/02	TTW-00718	C	1039.50	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/20/02	TTW-00719	D	1036.80	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/20/02	TTW-00720	K	997.15	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/20/02	TTW-00721	U	980.50	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/20/02	TTW-00722	U-Dup	961.20	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/20/02	TTW-00723	V	993.60	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/20/02	TTW-00724	S	900.95	Air	<7.0	<0.003	0	0	<11.43	<0.0049
02/20/02	TTW-00725	S-Dup	959.40	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/20/02	TTW-00726	E	916.20	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/20/02	TTW-00727	W	1193.50	Air	7.64	0.002	0	0	<13.33	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
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G: Church and Duane St.
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M1 : West St. - 50 yards south of Harrison St. at bulkhead
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P: NE corner of South End Ave. & Albany
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R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-02-20-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/23/02**
Sampling Date and Time: 2/20/02 1200 to 2359

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/20/02	TTW-00728	L	1069.2	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/20/02	TTW-00729	L-Dup	972	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/20/02	TTW-00730	M1	1017	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/20/02	TTW-00731	M1-Dup	1155.6	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/20/02	TTW-00732	N	1110.6	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/20/02	TTW-00733	J	1128.6	Air	7.64	0.003	0	0	<13.33	<0.0045
02/20/02	TTW-00734	Q	1103.4	Air	7.01	0.002	0	0	<13.33	<0.0047
02/20/02	TTW-00735	F	853.2	Air	<7.0	<0.003	0	0	<10.00	<0.0045
02/20/02	TTW-00736	A	1171.8	Air	8.92	0.003	0	0	<13.33	<0.0044
02/20/02	TTW-00737	B	1074.6	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/20/02	TTW-00738	C	1150.2	Air	7.64	0.003	0	0	<13.33	<0.0045
02/20/02	TTW-00739	D	1060.2	Air	10.19	0.004	0	0	<13.33	<0.0048
02/20/02	TTW-00740	K	980.9	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/20/02	TTW-00741	U	1011.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/20/02	TTW-00742	V	1155.6	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/20/02	TTW-00743	S	1137.6	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/20/02	TTW-00744	E	1117.8	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/20/02	TTW-00745	W	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048

Sampling Locations:
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V: Pier 6 Bus Sign
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Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
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**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-02-20-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/21/02 0001 to 1200

Data Validation Date: 02/24/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/21/02	FB022102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/21/02	TB022102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/21/02	TTW-00746	L-Dup	1056.6	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/21/02	TTW-00747	M1	1016.75	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/21/02	TTW-00748	N	1164.6	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/21/02	TTW-00749	J	1107	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/21/02	TTW-00750	J-Dup	964.8	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/21/02	TTW-00751	Q	1067.4	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/21/02	TTW-00752	F	971.25	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/21/02	TTW-00753	A	974.75	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/21/02	TTW-00754	C	1041.25	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/21/02	TTW-00755	C-Dup	1006.4	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/21/02	TTW-00756	B	950.4	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/21/02	TTW-00757	D	1233	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/21/02	TTW-00758	K	1043	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/21/02	TTW-00759	U	1090.8	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/21/02	TTW-00760	V	1063.8	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/21/02	TTW-00761	S	1296	Air	<7.0	<0.002	0	0	<13.33	<0.0040
02/21/02	TTW-00762	E	1058.4	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/21/02	TTW-00763	W	1004.4	Air	<7.0	<0.003	0	0	<11.43	<0.0044

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/24/02**
Sampling Date and Time: **2/21/02 1200 to 2400**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/21/02	TTW-00764	L	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/21/02	TTW-00765	M1	1011.6	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/21/02	TTW-00766	N	1062	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/21/02	TTW-00767	J	1103.4	Air	7.64	0.003	0	0	<13.33	<0.0047
02/21/02	TTW-00768	Q	1108.4	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/21/02	TTW-00769	F	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/21/02	TTW-00770	A	1121.4	Air	11.46	0.004	0	0	<13.33	<0.0046
02/21/02	TTW-00771	B	1216.8	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/21/02	TTW-00772	C	1047.6	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/21/02	TTW-00773	D	1134	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/21/02	TTW-00774	D-Dup	1105.2	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/21/02	TTW-00775	K	1078.2	Air	<7.0	<0.002	0	0	<13.33	<0.0048
02/21/02	TTW-00776	K-Dup	974.75	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/21/02	TTW-00777	U	1134	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/21/02	TTW-00778	V	1139.4	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/21/02	TTW-00779	S	1040.4	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/21/02	TTW-00780	E	1085.4	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/21/02	TTW-00781	W	1296	Air	22.29	0.007	0	0	<16.00	<0.0048

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/24/2002**
Sampling Date and Time: **2/22/01 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/22/01	FB022202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/22/01	TB022202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/22/01	TTW-00782	L	876.6	Air	<7.0	<0.003	0	0	<10.00	<0.0044
02/22/01	TTW-00783	M1	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/22/01	TTW-00784	N	963	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/22/01	TTW-00785	J	1022	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/22/01	TTW-00786	Q	1139.4	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/22/01	TTW-00787	F-Dup	889.2	Air	<7.0	<0.003	0	0	<10.00	<0.0043
02/22/01	TTW-00788	A	956.45	Air	7.64	0.003	0	0	<11.43	<0.0046
02/22/01	TTW-00789	A-Dup	969.4	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/22/01	TTW-00790	B	957.8	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/22/01	TTW-00791	C	1049.4	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/22/01	TTW-00792	D	1078.2	Air	<7.0	<0.002	0	0	<13.33	<0.0048
02/22/01	TTW-00793	K	1047.6	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/22/01	TTW-00794	U	1074.6	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/22/01	TTW-00795	V	995.4	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/22/01	TTW-00796	S	923.4	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/22/01	TTW-00797	E	973.8	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/22/01	TTW-00798	W	1074.6	Air	16.56	0.006	0	0	<13.33	<0.0048

No sample for Location F due to Battery Failure

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-02-22-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/25/02**
Sampling Date and Time: **2/22/02 1200 to 2334**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/22/02	TTW-00799	L	1080	Air	<7.0	<0.002	0	0	<13.33	<0.0048
02/22/02	TTW-00800	M1	1117.8	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/22/02	TTW-00801	N	1150.2	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/22/02	TTW-00802	N-Dup	1035	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/22/02	TTW-00803	J	1067.4	Air	14.01	0.005	0	0	<13.33	<0.0048
02/22/02	TTW-00804	Q	1214.5	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/22/02	TTW-00805	Q-Dup	1128.75	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/22/02	TTW-00806	A	1116	Air	8.28	0.003	0	0	<13.33	<0.0046
02/22/02	TTW-00807	B	1078.2	Air	7.64	0.003	0	0	<13.33	<0.0048
02/22/02	TTW-00808	C	999	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/22/02	TTW-00809	D	1126.8	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/22/02	TTW-00810	K	1024.2	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/22/02	TTW-00811	U	1144.8	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/22/02	TTW-00812	V	1109.5	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/22/02	TTW-00813	S	1079.75	Air	<7.0	<0.002	0	0	<13.33	<0.0048
02/22/02	TTW-00814	E	1049.4	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/22/02	TTW-00815	W	1026	Air	19.11	0.007	0	0	<13.33	<0.0050

No sample for Location F due to Battery Failure

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/25/2002**
Sampling Date and Time: **2/23/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/23/02	FB022302	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
02/23/02	TB022302	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
02/23/02	TTW-00816	L	1080	Air	<7.0	<0.002	0	0	<13.33	<0.0048
02/23/02	TTW-00817	M1	928.8	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/23/02	TTW-00818	N	980	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/23/02	TTW-00819	J	979.2	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/23/02	TTW-00820	Q	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/23/02	TTW-00821	A	973.8	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/23/02	TTW-00822	B	1094.4	Air	<7.0	<0.002	***2	0	26.67	0.0094
02/23/02	TTW-00823	D	1296	Air	<7.0	<0.002	***1	0	13.33	0.0040
02/23/02	TTW-00824	K	975.6	Air	NA[1]	NA[1]	0	0	<11.43	<0.0045
02/23/02	TTW-00825	V	1056.35	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/23/02	TTW-00826	U	954	Air	<7.0	<0.003	***1	0	11.43	0.0046
02/23/02	TTW-00827	S	1002.6	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/23/02	TTW-00828	S-Dup	957.6	Air	<7.0	<0.003	0	0	<11.43	<0.0046
02/23/02	TTW-00829	E	478.8	Air	<7.0	<0.006	0	0	<8.00	<0.0064
02/23/02	TTW-00830	E-Dup	993.6	Air	<7.0	<0.003	0	0	<11.43	<0.0044

No sample for Locations F, C, and W due to Battery Failure

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/23/02 1200 to 2041

Data Validation Date: 02/26/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/23/02	TTW-00831	L	1032	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/23/02	TTW-00832	M1	970	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/23/02	TTW-00833	M1-Dup	1002	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/23/02	TTW-00834	N	678	Air	<7.0	<0.004	0	0	<8.00	<0.0045
02/23/02	TTW-00835	J	1008	Air	<7.0	<0.003	***2	0	22.86	0.0087
02/23/02	TTW-00836	Q	930	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/23/02	TTW-00837	F	896	Air	<7.0	<0.003	0	0	<11.43	<0.0049
02/23/02	TTW-00838	A	1042	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/23/02	TTW-00839	B	1004	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/23/02	TTW-00840	C	1033.2	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/23/02	TTW-00841	D	752	Air	<7.0	<0.004	0	0	<8.89	<0.0046
02/23/02	TTW-00842	D-Dup	932	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/23/02	TTW-00843	U	928.8	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/23/02	TTW-00844	V	923.4	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/23/02	TTW-00845	S	928	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/23/02	TTW-00846	E	621.3	Air	<7.0	<0.004	0	0	<8.00	<0.0050
02/23/02	TTW-00847	W	930	Air	21.66	0.009	0	0	<11.43	<0.0047

No sample for Location K due to Battery Failure

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/24/02 0001 to 1200

Data Validation Date: 02/25/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm^2	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm^2	TEM (AHERA) S~f/cc**
02/24/02	FB022402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/24/02	TB022402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/24/02	TTW-00848	L	938	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/24/02	TTW-00849	M1	816	Air	<7.0	<0.003	0	0	<10.00	<0.0047
02/24/02	TTW-00850	N	924	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/24/02	TTW-00851	J	1028	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/24/02	TTW-00852	Q	1044	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/24/02	TTW-00853	F	882	Air	<7.0	<0.003	0	0	<10.00	<0.0044
02/24/02	TTW-00854	A	845.5	Air	<7.0	<0.003	0	0	<10.00	<0.0046
02/24/02	TTW-00855	A-Dup	524	Air	<7.0	<0.005	0	0	<8.00	<0.0059
02/24/02	TTW-00856	B	910	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/24/02	TTW-00857	D	860	Air	<7.0	<0.003	0	0	<10.00	<0.0045
02/24/02	TTW-00858	K	967.6	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/24/02	TTW-00859	K-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/24/02	TTW-00860	V	774	Air	<7.0	<0.003	0	0	<8.89	<0.0044
02/24/02	TTW-00861	U	541.8	Air	<7.0	<0.005	0	0	<8.00	<0.0057
02/24/02	TTW-00862	S	940	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/24/02	TTW-00863	W	1020	Air	12.10	0.005	0	0	<11.43	<0.0043

No sample for Locations E and C due to Pump Fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/25/02 0001 to 1135

Data Validation Date: 02/27/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/25/02	FB022502	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
02/25/02	TB022502	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
02/25/02	TTW-00881	L	1355.25	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/25/02	TTW-00882	M1	1000	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/25/02	TTW-00883	N	818	Air	<7.0	<0.003	0	0	<11.43	<0.0054
02/25/02	TTW-00884	J	1142.7	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/25/02	TTW-00885	J-Dup	647.4	Air	<7.0	<0.004	0	0	<8.89	<0.0053
02/25/02	TTW-00886	Q	1182.85	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/25/02	TTW-00887	F	1101.75	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/25/02	TTW-00888	A	1030	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/25/02	TTW-00889	B	1123.2	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/25/02	TTW-00890	C	1017.9	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/25/02	TTW-00891	D	1076.4	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/25/02	TTW-00892	K	1071.6	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/25/02	TTW-00893	U	942.5	Air	<7.0	<0.003	0	0	<13.33	<0.0054
02/25/02	TTW-00894	V	1011.6	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/25/02	TTW-00895	S	1026	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/25/02	TTW-00896	E	1041.3	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/25/02	TTW-00897	E-Dup	1142	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/25/02	TTW-00898	W	1020	Air	17.20	0.006	0	0	<11.43	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-25-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/17/02 0710 to 2117

Data Validation Date: 02/20/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/17/02	LF2889	P-1	1356.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/17/02	LF2890	P-2	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/17/02	LF2891	P-3	1361.80	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/17/02	LF2892	P-4	1384.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/17/02	LF2893	P-5	1245.05	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/17/02	LF2894	P-6	980.80	Air	<7.0	<0.003	0	0	<11.25	<0.0044
02/17/02	LF2895	P-7	1146.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/17/02	LF2896	P-8	1304.55	Air	<7.0	<0.002	1***	0	15.75	0.0046
02/17/02	LF2897	W-11	1046.40	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/17/02	LF2898	W-12A	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/17/02	LF2899	W-12B	1344.00	Air	15.29	0.004	1***	0	15.75	0.0045
02/17/02	LF2900	B-13	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/17/02	LF2901	B-14	1322.00	Air	<7.0	<0.002	NA(1)	NA(1)	NA(1)	NA(1)
02/17/02	LF2902	T-15	1728.00	Air	NA(1)	NA(1)	0	0	<19.69	<0.0044
02/17/02	LF2903	T-16	1440.00	Air	<7.0	<0.002	1***	1****	31.50	0.0084
02/17/02	LF2904	O-17	1335.75	Air	<7.0	<0.002	1***	0	15.75	0.0045
02/17/02	LF2905	O-18	1179.75	Air	<7.0	<0.002	0	0	<15.75	<0.0051
02/17/02	LF2906	O-19	1343.55	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/17/02	LF2907	MPHS-20	1310.00	Air	<7.0	<0.002	2***	0	31.50	0.0093
02/17/02	LF2908	P-1D	1340.00	Air	<7.0	<0.002	1***	0	15.75	0.0045
02/17/02	LF2909	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/17/02	LF2910	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

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n/a - Not applicable
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-17-02-Revised.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/21/02 0746 to 2230

Data Validation Date: 02/24/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/21/02	LF02978	P-1	1404.00	Air	7.64	0.002	***1	0	15.75	0.0043
02/21/02	LF02979	P-2	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/21/02	LF02980	P-3	1355.25	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/21/02	LF02981	P-4	1382.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/21/02	LF02982	P-5	1388.40	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/21/02	LF02983	P-6	1208.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/21/02	LF02984	P-7	1412.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/21/02	LF02985	P-8	1216.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/21/02	LF02986	W-11	1404.00	Air	26.75	0.007	***1	0	15.75	0.0043
02/21/02	LF02987	W-12A	1204.35	Air	19.11	0.006	***1	0	13.12	0.0042
02/21/02	LF02988	W-12B	1440.00	Air	<7.0	<0.002	***2	0	31.50	0.0084
02/21/02	LF02989	B-13	1388.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/21/02	LF02990	B-14	1336.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/21/02	LF02991	T-15	1440.00	Air	15.29	0.004	0	0	<15.75	<0.0042
02/21/02	LF02992	T-16	1440.00	Air	13.38	0.004	0	0	<15.75	<0.0042
02/21/02	LF02993	O-17	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/21/02	LF02994	O-18	1258.00	Air	7.64	0.002	0	0	<15.75	<0.0048
02/21/02	LF02995	O-19	1360.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/21/02	LF02996	MPHS-20	1382.00	Air	<7.0	<0.002	0	***1	15.75	0.0044
02/21/02	LF02997	P-1 Duplicate	1440.00	Air	7.64	0.002	0	0	<15.75	<0.0042
02/21/02	LF02998	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/21/02	LF02999	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-21-02 rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/22/02 0724 to 2119

Data Validation Date: 02/25/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/22/02	LF03000	P-1	1256.00	Air	<7.0	<0.002	***1	0	15.75	0.0048
02/22/02	LF03001	P-2	1404.00	Air	<7.0	<0.002	***1	0	15.75	0.0043
02/22/02	LF03002	P-3	1416.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/22/02	LF03003	P-4	1346.00	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/22/02	LF03004	P-5	1398.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/22/02	LF03005	P-6	1156.35	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/22/02	LF03006	P-7	1230.43	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/22/02	LF03007	P-8	1226.00	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/22/02	LF03008	W-11	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/22/02	LF03009	W-12A	1259.70	Air	17.83	0.005	0	0	<15.75	<0.0048
02/22/02	LF03010	W-12B	1362.30	Air	<7.0	<0.002	0	0	<15.75	<0.0045
02/22/02	LF03012	B-14	1179.90	Air	<7.0	<0.002	0	***1	13.12	0.0043
02/22/02	LF03013	T-15	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/22/02	LF03014	T-16	1422.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/22/02	LF03015	O-17	1422.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/22/02	LF03016	O-18	1198.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/22/02	LF03017	O-19	1292.85	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/22/02	LF03018	MPHS-20	1258.00	Air	<7.0	<0.002	***1	0	15.75	0.0048
02/22/02	LF03019	P-1 Duplicate	1349.40	Air	<7.0	<0.002	***1	0	15.75	0.0045
02/22/02	LF03020	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/22/02	LF03021	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No sample for Location B- 13 (Sample LF03011) due to pump fault

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-22-02.xls

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, March 6, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 6:00 p.m. on March 6

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 53 samples taken in and around ground zero on February 26 and February 27. EPA also sampled for asbestos at two additional lower Manhattan locations from February 14 through February 20, and on February 22. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for lower Manhattan to 6,533, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside Lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island) from February 14 through February 20, and on February 22. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Twenty air samples collected on February 26 were analyzed for asbestos. All

samples were below the school re-entry standard.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on February 28 and March 1 at Location "L" (northeast side of Stuyvesant High School); Location "N" (south side of Pier 25); and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

$PM_{2.5}$ - Monitoring for fine particulate matter (particles less than 2.5 micrometers in diameter) was conducted from February 18 through March 1 at Chambers & West Streets, Park Row, and Wall Street. All 24-hour averages were below the National Ambient Air Quality Standard (NAAQS) of 65 ug/m^3 for all stations. These results were also less than 40 ug/m^3, a level on the EPA Air Quality Index indicating that air quality is unhealthy for sensitive populations (e.g., those with respiratory illnesses).

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted from February 18 through March 1 at a location on Wall Street. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted from March 3 through March 5 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from March 3 through March 5 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, March 6, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 AM)

Results pending.

NYC / ER (Feb 26, 0001 - 0946 hrs)

All 13 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 26, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Feb 27, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location E) was not analyzed due to an equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 18)

Results pending.

Fresh Kills (Feb 19)

Results pending.

Fresh Kills (Feb 20)

Results pending.

Fresh Kills (Feb 23)

Results pending.

Fresh Kills (Feb 24)

Results pending.

Fresh Kills (Feb 25)

Results pending.

Fresh Kills (Feb 26)

All 20 samples analyzed were below the TEM AHERA standard.

Ambient Air Sampling Locations

NYC / ER (Feb 14 - 20) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 49 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 21) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Feb 22) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 18) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***6.46 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.53 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***7.42 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 18) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***18.82 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 19) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***13.57 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***17.76 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***15.73 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 19) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***33.59 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 20) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***17.39 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***19.04 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***19.57 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 20) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***35.62 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 21) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***15.57 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***15.41 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***15.33 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 21) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***24.28 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 22) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.51 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.92 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.64 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 22) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***17.67 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 23) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***9.49 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.59 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***10.81 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 23) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***19.48 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 24) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***10.32 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.37 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***11.27 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 24) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***19.08 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 25) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***11.63 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***13.18 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***12.99 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 25) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***25.40 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 26) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***16.80 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***18.05 ug/m³***.
Wall Street - 24-hour average concentrations for this period was ***17.54 ug/m³***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

NYC / ER (Feb 26) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***36.22 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10}

(150 ug/m^3).

NYC / ER (Feb 27) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***9.06 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***8.45 ug/m^3***.
Wall Street - 24-hour average concentrations for this period was ***8.47 ug/m^3***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Feb 27) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***16.59 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 28) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***9.26 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***9.13 ug/m^3***.
Wall Street - 24-hour average concentrations for this period was ***8.80 ug/m^3***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Feb 28) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***18.87 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Mar 1) - Particulate Monitoring (TEOM $PM_{2.5}$)

Park Row (Site 1) - 24-hr average concentration for this period was ***15.82 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***15.56 ug/m^3***.
Wall Street - 24-hour average concentrations for this period was ***16.61 ug/m^3***.
All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).

NYC / ER (Mar 1) - Particulate Monitoring (TEOM PM_{10})

Wall Street - 24-hour average concentrations for this period was ***32.29 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 28) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 6.94 ug/m^3 with a maximum reading of 40.19 ug/m^3.
Station N had an average 5.75 ug/m^3 with a maximum reading of 178.27 ug/m^3.
Station R had an average 3.70 ug/m^3 with a maximum reading of 28.21 ug/m^3.

NYC / ER (Mar 1) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 25.22 ug/m^3 with a maximum reading of 80.77 ug/m^3.
Station N had an average 17.78 ug/m^3 with a maximum reading of 30.96 ug/m^3.
Station R had an average 18.72 ug/m^3 with a maximum reading of 39.55 ug/m^3.

NYC / ER (Mar 3) - Particulate Monitoring (Dataram)

Particulate measurements were not taken at Stations L, N, and R due to the weather conditions.

NYC / ER (Mar 4) - Particulate Monitoring (Dataram)

Particulate measurements were not taken at Stations L, N, and R due to equipment malfunctions.

NYC / ER (Mar 3) - Volatile Organics (Mobile Laboratory)

Aside from a few compounds detected at one location (Austin Tobin Plaza), no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 4) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 5) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Bulk Sampling

NYC / ER (Feb 15) - Asbestos

8 bulk asbestos samples collected from the volleyball area at Pier 25.
Asbestos was not detected in any of these samples.

Fresh Kills (Feb 1) - Asbestos

6 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was either not detected or at less than 1% chrysotile in all of the samples.

Fresh Kills (Feb 8) - Asbestos

5 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was either not detected or at less than 1% chrysotile in all of the samples.

Fresh Kills (Feb 12) - Asbestos

6 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was either not detected or at less than 1% chrysotile in all of the samples.

Fresh Kills (Feb 16) - Asbestos

6 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was either not detected or at less than 1% chrysotile in all of the samples.

Fresh Kills (Mar 1) - Asbestos

6 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was detected in one sample at 1.2 % amosite at the barge area (B-14).
Asbestos was either not detected or at less than 1% chrysotile or 1% amosite in all of the other samples.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/01/2002**
Sampling Date and Time: 2/26/02 0001 to 0946

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/26/02	FB022602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/26/02	TB022602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/26/02	TTW-00913	L	500	Air	<7.0	<0.005	0	0	<7.87	<0.0061
02/26/02	TTW-00914	M1	973.05	Air	<7.0	<0.003	0	0	<13.12	<0.0052
02/26/02	TTW-00915	N	1120	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/26/02	TTW-00916	N-Dup	811.2	Air	<7.0	<0.003	0	0	<9.84	<0.0047
02/26/02	TTW-00917	J	950	Air	<7.0	<0.003	0	0	<11.25	<0.0046
02/26/02	TTW-00918	Q	1154	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/26/02	TTW-00919	F	1064	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00920	A	994	Air	<7.0	<0.003	0	0	<11.25	<0.0044
02/26/02	TTW-00921	B	908	Air	<7.0	<0.003	0	0	<11.25	<0.0048
02/26/02	TTW-00922	C	850.2	Air	<7.0	<0.003	0	0	<9.84	<0.0045
02/26/02	TTW-00923	D	1004	Air	<7.0	<0.003	0	0	<11.25	<0.0043
02/26/02	TTW-00924	K	1090.05	Air	<7.0	<0.003	0	0	<13.12	<0.0046
02/26/02	TTW-00925	K-Dup	1048	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/26/02	TTW-00926	U	995.4	Air	8.92	0.003	0	0	<11.25	<0.0044
02/26/02	TTW-00927	V	1025.5	Air	<7.0	<0.003	0	0	<13.12	<0.0049
02/26/02	TTW-00928	S	840.6	Air	<7.0	<0.003	0	0	<9.84	<0.0045
02/26/02	TTW-00929	E	923.4	Air	<7.0	<0.003	0	0	<11.25	<0.0047
02/26/02	TTW-00930	W	1002.6	Air	30.57	0.012	0	0	<11.25	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (filters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-26-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/26/02 1200 to 2359

Data Validation Date: 03/01/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/26/02	TTW-00931	L	1080	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00932	M1	1080	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00933	N	943.5	Air	<7.0	<0.003	0	0	<11.25	<0.0046
02/26/02	TTW-00934	J	1080	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00935	Q	1044	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/26/02	TTW-00936	F	1108.25	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/26/02	TTW-00937	A	1080	Air	<7.0	<0.003	0	****1	13.12	0.0047
02/26/02	TTW-00938	B	1080	Air	7.64	0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00939	C	1044	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/26/02	TTW-00940	C-Dup	1152	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/26/02	TTW-00941	D	1038	Air	<7.0	<0.003	0	0	<13.12	<0.0049
02/26/02	TTW-00942	K	1074	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00943	U	1080	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00944	V	1059	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/26/02	TTW-00945	S	1063.5	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/26/02	TTW-00946	E	1080	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00947	E-Dup	1080	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	TTW-00948	W	1080	Air	25.48	0.009	0	0	<13.12	<0.0047

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-26-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/03/2002**
Sampling Date and Time: 2/27/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/27/02	FB022702	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
02/27/02	TB022702	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
02/27/02	TTW-00949	L	1063.3	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/27/02	TTW-00950	M1	1046.1	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/27/02	TTW-00951	N	1051.2	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/27/02	TTW-00952	J	1103.6	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/27/02	TTW-00953	Q	1116	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/27/02	TTW-00954	Q-Dup	1107.15	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/27/02	TTW-00955	F	1052.7	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/27/02	TTW-00956	A	1036.2	Air	<7.0	<0.003	0	0	<13.12	<0.0049
02/27/02	TTW-00957	B	1188	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/27/02	TTW-00958	C	1082.9	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/27/02	TTW-00959	D	1062.4	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/27/02	TTW-00960	K	1097.6	Air	<7.0	<0.003	0	0	<13.12	<0.0046
02/27/02	TTW-00961	U	1168.2	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/27/02	TTW-00962	U-Dup	1126.4	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/27/02	TTW-00963	V	1019.7	Air	<7.0	<0.003	0	0	<13.12	<0.0050
02/27/02	TTW-00964	S	1009.05	Air	<7.0	<0.003	0	0	<11.25	<0.0043
02/27/02	TTW-00965	W	1037.85	Air	10.19	0.004	0	0	<13.12	<0.0049

No sample taken for Location E, due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-02-27-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/26/02 0734 to 2140

Data Validation Date: 03/1/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/26/02	LF03088	P-1	1080.00	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	LF03089	P-2	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/23/02	LF03090	P-3	1088.00	Air	<7.0	<0.003	0	0	<13.12	<0.0046
02/26/02	LF03091	P-4	1080.00	Air	<7.0	<0.003	***1	0	13.12	0.0047
02/26/02	LF03092	P-5	1008.00	Air	<7.0	<0.003	0	0	<11.25	<0.0043
02/26/02	LF03093	P-6	1044.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/26/02	LF03094	P-7	1080.00	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	LF03095	P-8	1044.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/26/02	LF03096	W-11	1008.00	Air	11.46	0.004	0	0	<11.25	<0.0043
02/26/02	LF03097	W-12A	1074.00	Air	26.75	0.010	***2	0	26.25	0.0094
02/26/02	LF03098	W-12B	1080.00	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	LF03099	B-13	1080.00	Air	7.64	0.003	0	0	<13.12	<0.0047
02/26/02	LF03100	B-14	1080.00	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	LF03101	T-15	1080.00	Air	15.29	0.005	***1	0	13.12	0.0047
02/26/02	LF03102	T-16	1080.00	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	LF03103	O-17	984.55	Air	<7.0	<0.003	0	0	<11.25	<0.0044
02/26/02	LF03104	O-18	1140.80	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/26/02	LF03105	O-19	1080.00	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/26/02	LF03106	MPHS-20	1057.65	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/26/02	LF03107	P-5 Dup	1008.00	Air	<7.0	<0.003	0	0	<11.25	<0.0043
02/26/02	LF03108	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/26/02	LF03109	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-26-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/19/02**
Sampling Date and Time: **2/14/02** **1200 to 2242**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/14/02	7093-18-0140	Park Row	1164	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/14/02	7093-19-0140	Chambers Street	1254	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/14/02	7093-15-0138	I.S. 143	1212	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/14/02	7094-09-0128	P.S. 154 (Bronx)	1284	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/14/02	7096-12-0134	P.S. 199 (Queens)	1266	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/14/02	7095-98-0134	P.S. 274(Brooklyn)	1010	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/14/02	7097-18-0131	P.S. 44 (S.I)	1106	Air	<7.0	<0.002	0	0	<13.33	<0.0046

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/20/02**
Sampling Date and Time: 2/15/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/15/02	7093-18-0141	Park Row	1256	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/15/02	7093-19-0141	Chambers Street	1156	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/15/02	7093-15-0139	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/15/02	7094-09-0129	P.S. 154 (Bronx)	1418	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/15/02	7096-12-0135	P.S. 199 (Queens)	1168	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/15/02	7095-98-0135	P.S. 274 (Brooklyn)	1412	Air	<7.0	<0.002	0	0	<16.00	<0.0044
02/15/02	7097-18-0132	P.S. 44 (SI)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 2/17/02 1200 to 2400

Data Validation Date: 02/21/02

Sampling Date	Sample No.	Sampling Location	Sample Volume**	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S-f/cc*
02/17/02	7093-18-0143	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/17/02	7093-19-0143	Chambers Street	1164	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/17/02	7093-15-0141	I.S. 143 Manhattan	1376	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/17/02	7094-09-0131	P.S. 154 (Bronx)	1372	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/17/02	7096-12-0137	P.S. 199 (Queens)	1246	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/17/02	7095-98-0137	P.S. 274 (Brooklyn)	1388	Air	<7.0	<0.002	0	0	<16.00	<0.0044
02/17/02	7097-18-0134	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 2/18/02 1200 to 2312

Data Validation Date: 02/24/02

Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/18/02	7093-18-0144	Park Row	1182	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/18/02	7093-19-0144	Chambers Street	1294	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/18/02	7093-15-0142	I.S. 143 Manhattan	1154	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/18/02	7094-09-0132	P.S. 154 (Bronx)	1302	Air	<7.0	<0.002	0	0	<16.00	<0.0047
02/18/02	7096-12-0138	P.S. 199 (Queens)	1346	Air	<7.0	<0.002	0	0	<16.00	<0.0046
02/18/02	7095-98-0138	P.S. 274 (Brooklyn)	884	Air	<7.0	<0.003	0	0	<10.00	<0.0044
02/18/02	7097-18-0135	P.S. 44 (S I)	1104	Air	<7.0	<0.002	0	0	<13.33	<0.0046

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 2/19/02 1200 to 2400

Data Validation Date: 02/24/02

Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/19/02	7093-18-0145	Park Row	1266	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/19/02	7093-19-0145	Chambers Street	1156	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/19/02	7093-15-0143	I.S. 143 Manhattan	1420	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/19/02	7094-09-0133	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/19/02	7096-12-0139	P.S. 199 (Queens)	1226	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/19/02	7095-98-0139	P.S. 274 (Brooklyn)	1380	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/19/02	7097-18-0136	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 2/20/02 1200 to 2331

Data Validation Date: 02/25/02

Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/20/02	7093-18-0146	Park Row	1166	Air	7.64	0.003	0	0	<13.33	<0.0044
02/20/02	7093-19-0146	Chambers Street	1238	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/20/02	7093-15-0144	I.S. 143 Manhattan	1156	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/20/02	7094-09-0134	P.S. 154 (Bronx)	1324	Air	<7.0	<0.002	0	0	<16.00	<0.0047
02/20/02	7096-12-0140	P.S. 199 (Queens)	1358	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/20/02	7095-98-0140	P.S. 274 (Brooklyn)	940	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/20/02	7097-16-0137	P.S. 44 (S I)	1156	Air	<7.0	<0.002	0	0	<13.33	<0.0044

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended l/mil for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 2/22/02 1200 to 2400

Data Validation Date: 02/27/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S-f/cc**
02/22/02	7093-18-0148	Park Row	1416	Air	<7.0	<0.002	0	0	<16.00	<0.0044
02/22/02	7093-19-0148	Chambers Street	1234	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/22/02	7093-15-0146	I.S. 143 Manhattan	1356	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/22/02	7094-09-0136	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/22/02	7096-12-0142	P.S. 199 (Queens)	1436	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/22/02	7095-98-0142	P.S. 274 (Brooklyn)	1198	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/22/02	7097-18-0139	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 1, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0644	0646	0641
Stop Time	1444	1446	1441
Run Time (minutes)	480	480	480
Maximum Concentration (ug/m^3)	80.77	30.96	39.55
Average Concentration (ug/m^3)	25.22	17.78	18.72

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: February 28, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0639	0641	0636
Stop Time	1440	1442	1438
Run Time (minutes)	481	481	482
Maximum Concentration (ug/m^3)	40.19	178.27	28.21
Average Concentration (ug/m^3)	6.94	5.75	3.70

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/05/02

File Name	NYC1210	NYC1211	NYC1212	NYC1213	NYC1215	NYC1214
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07558	A07559	A07561	A07560
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/04/02

File Name	NYC1202	NYC1203	NYC1204	NYC1205	NYC1207	NYC1206
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07553	A07554	A07555	A07556
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/03/02

File Name	NYC1193	NYC1194	NYC1195	NYC1196	NYC1199	NYC1198
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07549	A07550	A0755*	A07552
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	**440**	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	**480**	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	**120**	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	**41**	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 2/1/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
02/01/02	05941	B-14	Soil	<1% Chrysotile	6% Cellulose 4% Fiber Glass	90% Other
02/01/02	05942	B-14	Soil	None	20% Cellulose 10% Fiber Glass	70% Other
02/01/02	05943	B-13	Soil	None	10% Cellulose 7% Fiber Glass	83% Other
02/01/02	05944	B-13	Soil	None	12% Cellulose 8% Fiber Glass	80% Other
02/01/02	05945	LF Area D	Soil	None	10% Cellulose 7% Fiber Glass	83% Other
02/01/02	05946	LF Area D	Soil	None	10% Cellulose 5% Fiber Glass	85% Other

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 2/12/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
02/12/02	05961	B-13	Soil	None	10% Cellulose	75% Other
					15% Fiber Glass	
02/12/02	05962	B-13	Soil	None	10% Cellulose	75% Other
					15% Fiber Glass	
02/12/02	05963	B-14	Soil	<1% Chrysotile	15% Cellulose	70% Other
					15% Fiber Glass	
02/12/02	05964	B-14	Soil	<1% Chrysotile	15% Cellulose	65% Other
					20% Fiber Glass	
02/12/02	05965	LF-AREA D Sifting 3	Soil	None	20% Cellulose	60% Other
					20% Fiber Glass	
02/12/02	05966	LF - Bldg 6 Sifting 7	Soil	None	15% Cellulose	70% Other
					15% Fiber Glass	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC NYC
Sampling Date : 2/15/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
02/15/02	P25-1N	Pier 25	Soil	None	2% Cellulose	80% Quartz 18% Other
02/15/02	P25-1S	Pier 25	Soil	None	<1% Cellulose	85% Quartz 15% Other
02/15/02	P25-2N	Pier 25	Soil	None	2% Cellulose	85% Quartz 13% Other
02/15/02	P25-2S	Pier 25	Soil	None	<1% Cellulose	90% Quartz 10% Other
02/15/02	P25-3N	Pier 25	Soil	None	<1% Cellulose	85% Quartz 15% Other
02/15/02	P25-3S	Pier 25	Soil	None	2% Cellulose	80% Quartz 18% Other
02/15/02	P25-CPA1	Pier 25	Soil	None	<1% Cellulose	85% Quartz 15% Other
02/15/02	P25-CPA2	Pier 25	Soil	None	<1% Cellulose	85% Quartz 15% Other

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 2/16/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
02/16/02	05967	B-13	Soil	None	3% Cellulose	95% Other
					2% Fiber Glass	
02/16/02	A05968	WTC-SILF2.15.02	Soil	None	7% Cellulose	90% Other
					3% Fiber Glass	
02/16/02	05969	B-14	Soil	None	6% Cellulose	92% Other
					2% Fiber Glass	
02/16/02	05970	B-14	Soil	None	8% Cellulose	89% Other
					3% Fiber Glass	
02/16/02	05971	LF- AREA D SIFITNG #3	Soil	<1% Chrysotile	6% Cellulose	90% Other
					4% Fiber Glass	
02/12/02	05972	LF-AREA D SIFTING # 3	Soil	None	5% Cellulose	93% Other
					2% Fiber Glass	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 2/8/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
02/08/02	05954	B-13	Soil	None	5% Cellulose 4% Fiber Glass	91% Other
02/08/02	05955	B-14	Soil	<1% Chrysotile	10% Cellulose 3% Fiber Glass	87% Other
02/08/02	05956	B-14	Soil	None	10% Cellulose 4% Fiber Glass	86% Other
02/08/02	05957	LF Area D - Sifting #3	Soil	None	10% Cellulose 2% Fiber Glass	88% Other
02/08/02	05958	LF - Bldg 6 Sifting #7	Soil	None	8% Cellulose 3% Fiber Glass	89% Other

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 3/1/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
03/01/02	05991	LF Area D - Sifting Area # 2	Soil	<1% Amosite	10% Cellulose	85% Other
					5% Fiber Glass	
03/01/02	05992	B-13	Soil	<1%Chrysotile	10 % Cellulose	83% Other
					7% Fiber Glass	
03/01/02	05993	B-13	Soil	None	8% Cellulose	86% Other
					6% Fiber Glass	
					Trace Synthetic	
03/01/02	05994	B-14	Soil	0.57% Amosite	10% Cellulose	82.43% Other
				Trace Chrysotile	7% Fiber Glass	
03/01/02	05995	B-14	Soil	1.2 % Amosite	5% Cellulose	92.8% Other
				< 1% Chrysotile	1% Fiber Glass	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, March 7, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:15 p.m. on March 7

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 70 samples taken in and around ground zero from February 27 through March 1. EPA also sampled for asbestos at two additional lower Manhattan locations on February 23. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for lower Manhattan to 6,605, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside Lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island) on February 23. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Nineteen air samples collected on February 24 were analyzed for asbestos. All samples were below the school re-entry standard.

Metals - Five air samples were collected on February 13 and analyzed for metals. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on March 2, 5 and 6 at Location "L" (northeast side of Stuyvesant High School); Location "N" (south side of Pier 25); and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted on January 25 and 26, and from January 28 through February 5 at a location on Albany Street in Lower Manhattan. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted on January 26, from January 28 through February 3, and on February 5 at a location on Park Row in Lower Manhattan. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted on January 26, and from January 28 through February 5 at Chambers & West Streets in Lower Manhattan. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

PM_{10} - Monitoring for particulate matter (particles less than 10 micrometers in diameter) was conducted on January 26 and 28, and from January 30 through February 5 at P.S. 274 (800 Bushwick Avenue) in Brooklyn. All 24-hour average values were below the National Ambient Air Quality Standard of 150 ug/m3.

Dioxin - A total of 26 samples were collected from February 11 through February 18 at various locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

PCBs - A total of 60 samples were collected on February 5, 8, 12, 14, 19 and 21 at various locations in Lower Manhattan. PCBs were not detected in 59 of the samples. One sample detected PCBs, but at a level well below the EPA Removal Action level guidelines.

PAHs - A total of 98 samples were collected on January 15, 18, 22, 25, 29 and 31, and February 5, 8, 12 and 21 at various locations in Lower Manhattan. PAHs were not detected.

Metals - Ten samples were collected on January 18 at various locations in Lower Manhattan. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on March 2 and March 6 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots

of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on March 2 and March 6 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, March 7, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 AM)

Results pending.

NYC / ER (Feb 27, 1200 - 2359 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location K) was not analyzed due to an equipment malfunction.

NYC / ER (Feb 28, 0001 - 1151 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location A) was not analyzed due to an equipment malfunction.

NYC / ER (Feb 28, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 1, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 18)

Results pending.

Fresh Kills (Feb 19)

Results pending.

Fresh Kills (Feb 20)

Results pending.

Fresh Kills (Feb 23)

Results pending.

Fresh Kills (Feb 24, 0725 - 2058 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
1 sample (Location O-17) was considered invalid due to an equipment malfunctio

Fresh Kills (Feb 25)

Results pending.

Fresh Kills (Feb 13) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

Ambient Air Sampling Locations

NYC / ER (Feb 11 - 18) - Dioxin (EPA-ORD)

Five (5) 72-hour samples were collected during this period at Park Row (1 samples), Chambers St./West St. (2 samples), and Albany St. (2 samples) at roof top locations.
One (1) 48-hour sample was collected (due to equipment problems) during this period at Park Row at a rooftop location.
None of the samples collected were above the EPA Removal Action guideline (based on a 30-year exposure).
Note: The analytical results for all of these samples indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.
Data is not attached.

NYC / ER (Feb 12) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above thos in the control samples to be considered a valid result.

NYC / ER (Feb 14) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 18) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

NYC / ER (Jan 15) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Jan 18) - PAHs

All 9 samples analyzed did not detect any PAHs.
1 sample (Location P) was not collected due to an equipment malfunction.

NYC / ER (Jan 22) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Jan 25) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Jan 29) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Jan 31) - PAHs

All 9 samples analyzed did not detect any PAHs.
1 sample (Location C) was not collected due to an equipment malfunction.

NYC / ER (Feb 5) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Feb 8) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Feb 12) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Feb 21) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Feb 5) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Feb 8) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Feb 12) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Feb 14) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Feb 19) - PCBs

Trace amounts detected in 1 of 10 samples well below levels of concern. Concentration detected was below the EPA Removal Action level guidelines. 9 samples analyzed did not detect any PCBs.

NYC / ER (Feb 21) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Feb 21) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Feb 23) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:

- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)

- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Jan 25) - Particulate Monitoring (PM_{10} filter)

Albany St. - 24-hr average concentration for this period was ***23.6 ug/m³***. All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 26) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***34.7 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***37.0 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***24.5 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***21.1 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 28) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***49.9 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***54.2 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***39.4 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***39.2 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 29) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***54.2 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***57.7 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***49.1 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 30) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***34.2 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***37.4 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***36.7 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***31.7 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Jan 31) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***18.3 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***23.5 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***29.0 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***16.4 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 1) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***19.5 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***20.0 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***23.2 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***23.0 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

NYC / ER (Feb 2) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***16.3 ug/m³***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***21.7 ug/m³***.
Albany St. - 24-hr average concentration for this period was ***13.3 ug/m³***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***6.3 ug/m³***.
All readings below the National Ambient Air Quality Standard for PM_{10}

(150 ug/m^3).

NYC / ER (Feb 3) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***20.9 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***25.2 ug/m^3***.
Albany St. - 24-hr average concentration for this period was ***18.7 ug/m^3***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***11.6 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 4) - Particulate Monitoring (PM_{10} filter)

Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***37.7 ug/m^3***.
Albany St. - 24-hr average concentration for this period was ***27.2 ug/m^3***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***10.9 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Feb 5) - Particulate Monitoring (PM_{10} filter)

Park Row (Site 1) - 24-hour average concentration for this period was ***34.7 ug/m^3***.
Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***37.7 ug/m^3***.
Albany St. - 24-hr average concentration for this period was ***27.6 ug/m^3***.
P.S. 274 - 800 Bushwick Avenue, Brooklyn (Site 7) - 24-hour average concentration for this period was ***14.7 ug/m^3***.
All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).

NYC / ER (Mar 2) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 34.37 ug/m^3 with a maximum reading of 70.25 ug/m^3.
Station N had an average 37.19 ug/m^3 with a maximum reading of 94.72 ug/m^3.
Station R had an average 37.16 ug/m^3 with a maximum reading of 85.83 ug/m^3.

NYC / ER (Mar 5) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 15.99 ug/m^3 with a maximum reading of 376.1 ug/m^3.
Station N had an average 14.68 ug/m^3 with a maximum reading of 100.64 ug/m^3.
Station R had an average 14.27 ug/m^3 with a maximum reading of 69.16 ug/m^3.

NYC / ER (Mar 6) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 46.59 ug/m^3 with a maximum reading of 116.07 ug/m^3.
Station N had an average 32.16 ug/m^3 with a maximum reading of 200.02 ug/m^3.
Station R had an average 38.33 ug/m^3 with a maximum reading of 86.01 ug/m^3.

NYC / ER (Mar 2) - Volatile Organics (Mobile Laboratory)

No volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 6) - Volatile Organics (Mobile Laboratory)

Aside from one compound detected at three of the four locations, no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/1/02**
Sampling Date and Time: **2/27/02 1200 to 2359**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/27/02	TTW-00966	L	1096.5	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/27/02	TTW-00967	M1	1132.2	Air	7.64	0.003	0	0	<13.33	<0.0045
02/27/02	TTW-00968	N	1027.95	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/27/02	TTW-00969	J	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/27/02	TTW-00970	J-Dup	1060.95	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/27/02	TTW-00971	Q	1120.3	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/27/02	TTW-00972	F	1106.7	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/27/02	TTW-00973	A	1065.9	Air	12.74	0.005	0	0	<13.33	<0.0048
02/27/02	TTW-00974	B	1174.8	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/27/02	TTW-00975	C	1179.8	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/27/02	TTW-00976	D	1096.5	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/27/02	TTW-00977	U	1130.5	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/27/02	TTW-00978	V	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/27/02	TTW-00979	S	987.7	Air	<7.0	<0.003	0	0	<11.43	<0.0045
02/27/02	TTW-00980	S-Dup	1030.2	Air	<7.0	<0.003	0	0	<13.33	<0.0050
02/27/02	TTW-00981	E	1140.7	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/27/02	TTW-00982	W	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042

No sample for Location K- Duplicate due to Pump Fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: **2/28/02 0001 to 1151**

Data Validation Date: 03/01/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/28/02	FB022802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/28/02	TB022802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/28/02	TTW-00983	L	1093.75	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/28/02	TTW-00984	M1	1023.75	Air	<7.0	<0.003	0	0	<13.33	<0.0050
02/28/02	TTW-00985	N	919.7	Air	<7.0	<0.003	0	0	<11.43	<0.0048
02/28/02	TTW-00986	N-Dup	1127.1	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/28/02	TTW-00987	J	1176	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/28/02	TTW-00988	Q	1082.25	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/28/02	TTW-00989	F	1139.25	Air	7.64	0.003	0	0	<13.33	<0.0045
02/28/02	TTW-00990	F-Dup	1011.5	Air	<7.0	<0.003	0	0	<13.33	<0.0051
02/28/02	TTW-00991	B	1173.15	Air	7.01	0.002	0	0	<13.33	<0.0044
02/28/02	TTW-00992	C	1155.6	Air	7.64	0.003	0	0	<13.33	<0.0044
02/28/02	TTW-00993	D	914.6	Air	10.19	0.004	0	0	<11.43	<0.0048
02/28/02	TTW-00994	K	1046.1	Air	<7.0	<0.003	0	0	<13.33	<0.0049
02/28/02	TTW-00995	U	656.7	Air	<7.0	<0.004	0	0	<8.00	<0.0047
02/28/02	TTW-00996	V	1079.5	Air	<7.0	<0.003	0	0	<13.33	<0.0048
02/28/02	TTW-00997	S	1077.25	Air	<7.0	<0.002	0	0	<13.33	<0.0048
02/28/02	TTW-00998	E	1027.25	Air	11.46	0.004	0	0	<11.43	<0.0043
02/28/02	TTW-00999	W	1141	Air	11.46	0.004	0	0	<13.33	<0.0045

No sample was taken for Location A due to pump fault.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-02-28-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/01/2002**
Sampling Date and Time: **2/28/02 1200 to 2359**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/28/02	TTW-01000	E	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/28/02	TTW-01001	S	1171.3	Air	<7.0	<0.002	0	0	<13.33	<0.0044
02/28/02	TTW-01002	V	996.2	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/28/02	TTW-01003	U	1220.6	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/28/02	TTW-01004	K	1188	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/28/02	TTW-01005	D	1047.2	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/28/02	TTW-01006	C	1047.2	Air	10.19	0.004	0	0	<11.43	<0.0042
02/28/02	TTW-01007	B	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/28/02	TTW-01008	A	1146.75	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/28/02	TTW-01009	F	1205.3	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/28/02	TTW-01010	Q	1201.9	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/28/02	TTW-01011	J	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/28/02	TTW-01012	N	1189.8	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/28/02	TTW-01013	M1-Dup	1250.2	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/28/02	TTW-01014	M1	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/28/02	TTW-01015	L-Dup	1233.75	Air	<7.0	<0.002	0	0	<13.33	<0.0042
02/28/02	TTW-01016	L	1026.3	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/28/02	TTW-01017	W	1190	Air	7.64	0.002	0	0	<13.33	<0.0043

Please note the sampling route has been reversed

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/03/2002**
Sampling Date and Time: 3/1/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/01/02	TTW-01018	W	1149.75	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	FB030102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/01/02	TB030102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/01/02	TTW-01019	E	1144.1	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	TTW-01020	S	1045.5	Air	<7.0	<0.003	0	0	<11.43	<0.0042
03/01/02	TTW-01021	V	1144.1	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	TTW-01022	U	1130.5	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	TTW-01023	K	1116.9	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/01/02	TTW-01024	D	1085	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/01/02	TTW-01025	C	1082.4	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/01/02	TTW-01026	B	977.5	Air	<7.0	<0.003	0	0	<11.43	<0.0045
03/01/02	TTW-01027	A-Dup	1113.5	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/01/02	TTW-01028	A	1006.25	Air	<7.0	<0.003	0	0	<11.43	<0.0044
03/01/02	TTW-01029	F	1137.3	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	TTW-01030	Q	1141.9	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	TTW-01031	J-Dup	1037	Air	<7.0	<0.003	0	0	<11.43	<0.0042
03/01/02	TTW-01032	J	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/01/02	TTW-01033	N	957.25	Air	<7.0	<0.003	0	0	<11.43	<0.0046
03/01/02	TTW-01034	M1	980	Air	<7.0	<0.003	0	0	<11.43	<0.0045
03/01/02	TTW-01035	L	1097.25	Air	<7.0	<0.002	0	0	<13.33	<0.0047

Please Note the Sampling route has been reversed

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/24/02 0725 to 2058

Data Validation Date: 02/27/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
02/24/02	LF03044	P-1	1262.80	Air	8.92	0.003	0	0	<15.75	<0.0048
02/24/02	LF03045	P-2	1382.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/23/02	LF03046	P-3	1056.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/24/02	LF03047	P-3 Duplicate	1024.10	Air	<7.0	<0.003	0	0	<13.12	<0.0049
02/24/02	LF03048	P-4	1327.95	Air	10.19	0.003	0	0	<15.75	<0.0046
02/24/02	LF03049	P-5	1218.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/24/02	LF03050	P-6	1218.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/24/02	LF03051	P-7	1260.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/24/02	LF03052	P-8	1154.40	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/24/02	LF03053	W-11	1104.95	Air	26.75	0.009	0	0	<15.75	<0.0055
02/24/02	LF03054	W-12A	1303.80	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/24/02	LF03055	W-12B	1098.80	Air	138.85	0.049	0	0	<13.12	<0.0046
02/24/02	LF03056	B-13	1400.15	Air	7.64	0.002	0	0	<15.75	<0.0043
02/24/02	LF03057	B-14	1320.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/24/02	LF03058	T-15	1296.00	Air	11.46	0.003	0	0	<15.75	<0.0047
02/24/02	LF03059	T-16	895.85	Air	8.92	0.004	0	0	<11.25	<0.0048
02/24/02	LF03060	O-17	0.00	Air	R	R	R	R	R	R
02/24/02	LF03061	O-18	732.00	Air	<7.0	<0.004	0	0	<8.75	<0.0046
02/24/02	LF03062	O-19	1204.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/24/02	LF03063	MPHS-20	1240.00	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/24/02	LF03064	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/24/02	LF03065	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted
R - Sample data rejected due to no sample volume

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-02-24-02 rev1.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 02/27/02**
Sampling Date and Time: 2/23/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S-f/cc**
02/23/02	7093-18-0149	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/23/02	7093-19-0149	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/23/02	7093-15-0147	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/23/02	7094-09-0137	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/23/02	7096-12-0143	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/23/02	7095-98-0143	P.S. 274 (Brooklyn)	1254	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/23/02	7097-18-0140	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0097		WTC-0098		WTC-0092	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		120	
Date Collected		-		-		-		02/13/02		02/13/02		02/13/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	10
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.42
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.42
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	1.0
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.42
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	1.0
Calcium	ICAP	3.4	2.5	4.0	2.5	3.6	2.5	U	2.5	U	2.5	U	21
Chromium	ICAP	0.55	0.13	0.88	0.13	0.9	0.13	U	0.13	0.20	0.13	U	1.0
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	2.1
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	2.1
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	U	5.2
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.42
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	100
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	1.0
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	2.1
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	420
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.42
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	1.0
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	100
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.42
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	2.1
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	2.1

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0093		WTC-0094		WTC-0095		WTC-0096	
Location		P-8		O-17		O-18		O-19	
Air Volume (L)		2520		3920		4000		4290	
Date Collected		02/13/02		02/13/02		02/13/02		02/13/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.1	0.5	0.63	0.32	0.40	0.31	U	0.29
Antimony	AA-Fur	U	0.02	U	0.013	U	0.013	U	0.012
Arsenic	AA-Fur	U	0.02	U	0.013	U	0.013	U	0.012
Barium	ICAP	U	0.05	U	0.032	0.041	0.031	U	0.029
Beryllium	ICAP	U	0.02	U	0.013	U	0.013	U	0.012
Cadmium	ICAP	U	0.05	U	0.032	U	0.031	U	0.029
Calcium	ICAP	11	0.99	6.6	0.64	1.8	0.63	0.92	0.58
Chromium	ICAP	0.076	0.05	U	0.032	U	0.031	U	0.029
Cobalt	ICAP	U	0.099	U	0.064	U	0.063	U	0.058
Copper	ICAP	0.11	0.099	0.064	0.064	U	0.063	U	0.058
Iron	ICAP	1.9	0.25	1.2	0.16	1.1	0.16	0.45	0.15
Lead	AA-Fur	0.10	0.02	0.068	0.013	0.02	0.013	0.016	0.012
Magnesium	ICAP	U	5	U	3.2	U	3.1	U	2.9
Manganese	ICAP	U	0.05	U	0.032	U	0.031	U	0.029
Nickel	ICAP	U	0.099	U	0.064	U	0.063	U	0.058
Potassium	ICAP	U	20	U	13	U	13	U	12
Selenium	AA-Fur	U	0.02	U	0.013	U	0.013	U	0.012
Silver	ICAP	U	0.05	U	0.032	U	0.031	U	0.029
Sodium	ICAP	U	5	U	3.2	U	3.1	U	2.9
Thallium	AA-Fur	U	0.02	U	0.013	U	0.013	U	0.012
Vanadium	ICAP	U	0.099	U	0.064	U	0.063	U	0.058
Zinc	ICAP	0.20	0.099	0.14	0.064	0.10	0.063	U	0.058

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/12/02

Sample No.	WG7104-1			06425			06426			06427			06428			06429		
Sampling Location	Method Blank			R- TAGA			R-TAGA			Location A			Location 3A			B-Church & Dey St.		
Volume (Liters)	0			6100			7198			6165			5664			5655		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0033	U		0.0028	U		0.0032	U		0.0035	U		0.0035
12378-PeCDD	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
123478-HxCDD	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
123678-HxCDD	U		0.10	U	0.0007	0.016	0.0007 J		0.014	U		0.016	U		0.018	U		0.018
123789-HxCDD	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
1234678-HpCDD	0.0047 J		0.10	U	0.0006	0.016	U		0.014	U	0.0007	0.016	U	0.0006	0.018	U	0.0008	0.018
OCDD	U	0.0131	0.20	U	0.0023	0.033	U		0.028	U	0.0027	0.032	U		0.035	U		0.035
2378-TCDF	U		0.020	U		0.0033	U		0.0028	U		0.0032	U		0.0035	U		0.0035
12378-PeCDF	U	0.0024	0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
23478-PeCDF	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
123478-HxCDF	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
123678-HxCDF	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
234678-HxCDF	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
123789-HxCDF	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
1234678-HpCDF	0.0020 J		0.10	U		0.016	U		0.014	0.0003 J		0.016	U		0.018	U		0.018
1234789-HpCDF	U		0.10	U		0.016	U		0.014	U		0.016	U		0.018	U		0.018
OCDF	U		0.20	U		0.033	U		0.028	U		0.032	U		0.035	U		0.035
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			0.0007			U			U			U		
Total HpCDDs	0.0047			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	0.0020			U			U			0.0003			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0001			0.0000			0.0001			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0399			0.0005			0.0005			0.0006			0.0007			0.0008		

COC# 02/12/02 dioxin

B= Not detected due to blank contamination

EMPC: Estimated Maximum Possible Concentration

TEQ: Toxicity Equivalent

ERTC 2/25/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

2-12-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/12/02

Sample No.	06430			06431			06432			06433			06434			06435			06436		
Sampling Location	C-Liberty St. & Church St.			D Greenwich & Albany St.			Location S			Location P			Location E			Field Blank			Lot Blank		
Volume (Liters)	7125			5930.5			6405			7119.5			6292.8			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0028	U		0.0034	U		0.0031	U		0.0028	U		0.0032	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
123478-HxCDD	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
123678-HxCDD	0.0004		0.014	U		0.017	U	0.0009	0.016	U	0.0007	0.014	0.0008 J		0.016	U		0.10	U		0.10
123789-HxCDD	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
1234678-HpCDD	U		0.014	U	0.0007	0.017	U		0.016	U		0.014	U		0.016	U	0.0043	0.10	0.0038 J		0.10
OCDD	U		0.028	U		0.0034	U		0.031	U		0.028	U		0.032	U		0.20	0.0111 J		0.20
2378-TCDF	U		0.0028	U		0.0034	U		0.0031	U		0.0028	U		0.0032	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
123478-HxCDF	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
123678-HxCDF	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
234678-HxCDF	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
1234678-HpCDF	U		0.014	U		0.017	U		0.016	U		0.014	U	0.0002	0.016	U		0.10	U		0.10
1234789-HpCDF	U		0.014	U		0.017	U		0.016	U		0.014	U		0.016	U		0.10	U		0.10
OCDF	U		0.028	U		0.0034	U		0.031	U		0.028	U		0.032	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	0.0004			U			U			U			0.0008			U			U		
Total HpCDDs	U			U			U			U			U			U			0.0036		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0001			0.0000			0.0000		
TEQ (ND=1/2)	0.0004			0.0005			0.0005			0.0006			0.0004			0.0401			0.0399		

COC# 02/12/02 dioxin

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/14/02

Sample No.	WG7106-1			06439			06440			06441			06442		
Sampling Location	Method Blank			Location A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			7440			7301.25			7063.88			6083.88		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0027	U		0.0027	U		0.0029	U		0.0033
12378-PeCDD	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
123478-HxCDD	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
123678-HxCDD	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
123789-HxCDD	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
1234678-HpCDD	U	0.0085	0.10	U		0.013	U		0.014	U	0.0008	0.014	U		0.016
OCDD	U	0.0249	0.20	U		0.027	U		0.027	U		0.029	U	0.0032	0.033
2378-TCDF	U		0.020	U		0.0027	U		0.0027	U		0.0029	U		0.0033
12378-PeCDF	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
23478-PeCDF	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
123478-HxCDF	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
123678-HxCDF	U		0.10	U		0.013	U		0.014	0.0001 J		0.014	U		0.016
234678-HxCDF	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
123789-HxCDF	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
1234678-HpCDF	U		0.10	0.0004 J		0.013	U		0.014	U		0.014	U		0.016
1234789-HpCDF	U		0.10	U		0.013	U		0.014	U		0.014	U		0.016
OCDF	U		0.20	U		0.027	U		0.027	U		0.029	U		0.033
Total TCDDs	U			U			U			U			U		
Total PeCDDs	U			U			U			U			U		
Total HxCDDs	U			U			U			U			U		
Total HpCDDs	U			U			U			U			U		
Total TCDFs	U			U			U			U			U		
Total PeCDFs	U			U			U			U			U		
Total HxCDFs	U			U			U			0.0001			U		
Total HpCDFs	U			0.0004			U			U			U		
Total Adjusted Conc															
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0422			0.0012			0.0013			0.0006			0.0014		

COC# 02/14/02 dioxin

B= Not detected due to blank contamination

EMPC: Estimated Maximum Possible Concentration

TEQ: Toxicity Equivalent

ERTC 3/04/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

2-14-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/14/02

Sample No.	06443			06445			06447			06448		
Sampling Location	D Greenwich & Albany St.			Location P			Field Blank			Lot Blank		
Volume (Liters)	5580			6639.75			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0036	U		0.0030	U		0.020	U		0.020
12378-PeCDD	U		0.018	U		0.015	U		0.10	U		0.10
123478-HxCDD	U		0.018	U		0.015	U		0.10	U		0.10
123678-HxCDD	U		0.018	U		0.015	U		0.10	0.0046 J		0.10
123789-HxCDD	U		0.018	U		0.015	U		0.10	U		0.10
1234678-HpCDD	U	0.0005	0.018	U		0.015	0.0042 J		0.10	U	0.0038	0.10
OCDD	U		0.0036	U		0.030	0.0180 J		0.20	U	0.0106	0.20
2378-TCDF	U		0.0036	U		0.0030	U		0.020	U		0.020
12378-PeCDF	U		0.018	U		0.015	U		0.10	U		0.10
23478-PeCDF	U		0.018	U		0.015	U		0.10	U		0.10
123478-HxCDF	U		0.018	U		0.015	U		0.10	U		0.10
123678-HxCDF	U		0.018	U		0.015	U		0.10	U		0.10
234678-HxCDF	U		0.018	U		0.015	U		0.10	U		0.10
123789-HxCDF	U		0.018	U		0.015	U		0.10	U		0.10
1234678-HpCDF	U		0.018	U		0.015	U		0.10	U		0.10
1234789-HpCDF	U		0.018	U		0.015	U		0.10	U		0.10
OCDF	U		0.0036	U		0.030	U		0.20	U		0.20
Total TCDDs	U			U			U			U		
Total PeCDDs	U			U			U			U		
Total HxCDDs	U			U			U			0.0046		
Total HpCDDs	U			U			0.0042			U		
Total TCDFs	U			U			U			U		
Total PeCDFs	U			U			U			U		
Total HxCDFs	U			U			U			U		
Total HpCDFs	U			U			U			U		

Total Adjusted Conc

TEQ (ND=0)	0.0000			0.0000			0.0001			0.0005		
TEQ (ND=1/2)	0.0014			0.0014			0.0385			0.0385		

COC# 02/14/02 dioxin

2-14-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/14/02

Sample No.	WG7106C-1			06437			06438			06444			06446		
Sampling Location	Method Blank			R- TAGA			R-TAGA			Location S			Location E		
Volume (Liters)	0			5730			7266.5			4980			7005		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0035	U		0.0027	U		0.0040	U		0.0029
12378-PeCDD	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
123478-HxCDD	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
123678-HxCDD	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
123789-HxCDD	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
1234678-HpCDD	U		0.10	U		0.017	U	0.0006	0.014	U		0.02	U	0.0006	0.014
OCDD	U	0.0194	0.20	U	0.0024	0.035	U		0.027	U	0.0031	0.040	U		0.029
2378-TCDF	U		0.020	U		0.0035	U		0.0027	U		0.0040	U		0.0029
12378-PeCDF	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
23478-PeCDF	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
123478-HxCDF	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
123678-HxCDF	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
234678-HxCDF	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
123789-HxCDF	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
1234678-HpCDF	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
1234789-HpCDF	U		0.10	U		0.017	U		0.014	U		0.02	U		0.014
OCDF	U		0.20	U		0.035	U		0.027	U		0.040	U		0.029
Total TCDDs	U			U			U			U			U		
Total PeCDDs	U			U			U			U			U		
Total HxCDDs	U			U			U			U			U		
Total HpCDDs	U			U			0.0003			U			U		
Total TCDFs	U			U			U			U			U		
Total PeCDFs	U			U			U			U			U		
Total HxCDFs	U			U			U			U			U		
Total HpCDFs	U			U			U			U			U		

Total Adjusted Conc

TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0006		
TEQ (ND=1/2)	0.0401			0.0007			0.0006			0.0009			0.0006		

COC# 02/14/02 dioxin

2-14-02dioair.xls

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06223		06224		06213		06214		06215		06216	
Location		Field Blank		Lot Blank		R(TAGA)		A-BARCLAY ST. & WEST BROADWAY		LOC 3A BTWN LOTC 4 + 5		B-CHURCH & DEY ST.	
Air Volume (L)		0				3830		4360		4590		4080	
Date Collected		01/18/02		01/18/02		01/18/02		01/18/02		01/18/02		01/18/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.67 J	0.60	0.60 J	0.60	U J	0.20	6.3 J	0.10	3.2 J	0.13	1.9 J	0.14
Antimony	ICAP	U	0.075	U	0.075	U	0.020	0.017	0.017	0.016	0.016	U	0.018
Arsenic	AA-Fur	U	0.032	U	0.032	U	0.008	U	0.007	0.007	0.007	U	0.008
Barium	ICAP	U	0.32	U	0.32	U	0.082	0.134	0.072	0.073	0.070	U	0.080
Beryllium	ICAP	U	0.049	U	0.049	U	0.013	U	0.011	U	0.011	U	0.012
Cadmium	ICAP	U J	0.016	U J	0.016	U J	0.004	U J	0.004	U J	0.004	U J	0.004
Calcium	ICAP	3.6	3.4	3.6	3.4	1.5	0.90	68	0.79	46	0.80	20	0.80
Chromium	ICAP	0.84	0.042	0.93	0.042	U	0.011	U	0.01	U	0.009	U	0.010
Cobalt	ICAP	U J	0.034	U J	0.034	U J	0.009	U J	0.008	U J	0.007	U J	0.008
Copper	ICAP	U	0.44	U	0.44	U	0.12	0.60	0.10	0.19	0.10	0.12	0.11
Iron	ICAP	U	0.91	U	0.91	0.64	0.24	16	0.21	7.6	0.20	5.7	0.22
Lead	AA-Fur	U	0.01	U	0.01	0.013	0.003	0.33	0.002	0.28	0.002	0.103	0.002
Magnesium	ICAP	U	3.3	U	3.3	U	0.87	13	0.80	6.2	0.70	3.6	0.80
Manganese	ICAP	U	0.078	U	0.078	U	0.020	0.32	0.02	0.15	0.017	0.11	0.019
Nickel	ICAP	U J	0.058	U J	0.058	U J	0.015	0.020 J	0.013	U J	0.013	U J	0.014
Potassium	ICAP	U J	3.7	U J	3.7	U J	0.96	1.4 J	0.80	U J	0.80	U J	0.90
Selenium	AA-Fur	U	0.075	U	0.075	U	0.020	U J		U	0.016	U	0.018
Silver	ICAP	U	0.025	U	0.025	U	0.007	U	0.006	U	0.005	U	0.006
Sodium	ICAP	U	3.7	U	3.7	U	0.96	0.89	0.84	2.2	0.80	U	0.90
Thallium	ICAP	U	0.035	U	0.035	U	0.009	U	0.008	U	0.008	U	0.009
Vanadium	ICAP	U	0.037	U	0.037	U	0.010	0.036	0.008	0.008	0.008	0.009	0.009
Zinc	ICAP	U	0.079	U	0.079	U	0.020	U	0.018	U	0.017	U	0.019

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
J denotes the value has been qualified as estimated.
Average Lot Blank and Field Blank concentrations were subtracted from all sample results

Table 1.0 (cont) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06217		06218		06219		06020		06021		06022	
Location		B-CHURCH & DEY ST.		C-LIBERTY ST. & CHURCH ST.		D GREENWICH & ALBANY ST.		P ALBANY ST & SOUTH END AVE.		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		4850		4710		3978		4120		3630		3950	
Date Collected		01/18/02		01/18/02		01/18/02		01/18/02		01/18/02		01/18/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.6 J	0.10	0.69 J	0.10	0.84 J	0.15	0.76 J	0.14	0.66 J	0.16	0.73 J	0.15
Antimony	ICAP	U	0.015	U	0.016	U	0.019	U	0.018	U	0.021	U	0.019
Arsenic	AA-Fur	U	0.007	U	0.007	U	0.008	U	0.008	U	0.009	U	0.008
Barium	ICAP	U	0.065	U	0.067	U	0.079	U	0.077	U	0.087	U	0.080
Beryllium	ICAP	U	0.010	U	0.010	U	0.012	U	0.012	U	0.013	U	0.012
Cadmium	ICAP	U J	0.003	U J	0.003	U J	0.004	U J	0.004	U J	0.004	U J	0.004
Calcium	ICAP	17	0.71	6.5	0.70	7.3	0.87	6.3	0.84	6.3 4	0.95	4.8	0.87
Chromium	ICAP	U	0.12	U	0.01	U	0.011	U	0.010	U	0.19	U	0.011
Cobalt	ICAP	U J	0.007	U J	0.007	U J	0.008	U J	0.008	U J	0.009	U J	0.009
Copper	ICAP	0.104	0.091	U	0.094	U	0.11	U	0.11	U	0.12	U	0.11
Iron	ICAP	5.0	0.19	2.9	0.19	2.0	0.23	2.7	0.22	2.3	0.25	1.8	0.23
Lead	AA-Fur	0.088	0.002	0.041	0.002	0.043	0.003	0.04	0.002	0.021	0.003	0.026	0.003
Magnesium	ICAP	3.1	0.68	1.02	0.70	1.4	0.83	2.0	0.80	1.3	0.91	1.2	0.84
Manganese	ICAP	0.088	0.016	0.045	0.016	0.045	0.019	0.043	0.019	0.035	0.021	0.035	0.020
Nickel	ICAP	U J	0.012	U J	0.012	U J	0.015	U J	0.014	U J	0.016	U J	0.015
Potassium	ICAP	U J	0.76	U J	0.78	U J	0.92	U J	0.89	U J	1.0	U J	0.93
Selenium	AA-Fur	U	0.015	U	0.016	U	0.019	U	0.018	U	0.021	U	0.019
Silver	ICAP	U	0.005	U	0.005	U	0.006	U	0.006	U	0.007	U	0.006
Sodium	ICAP	U	0.76	U	0.78	U	0.92	U	0.89	U	1.0	U	0.93
Thallium	ICAP	U	0.007	0.013	0.007	U	0.009	U	0.008	U	0.01	U	0.009
Vanadium	ICAP	U	0.008	U	0.008	U	0.009	U	0.009	U	0.01	U	0.009
Zinc	ICAP	U	0.016	U	0.016	U	0.020	U	0.019	U	0.022	U	0.020

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Lot Blank and Field Blank concentrations were subtracted from all sample results

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 1/15/02										
Sample No.	06175		06176		06177		06178		06179	
Sampling Location	Location R		Location A		Location 3A		Location B		Location B	
Volume (L)	480		480		468		468		480	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	3.0	U	3.0	U	3.1	U	3.1	U	3.0
2-Methylnaphthalene	U	2.7	U	2.7	U	2.8	U	2.8	U	2.7
1-Methylnaphthalene	U	2.7	U	2.7	U	2.8	U	2.8	U	2.7
Biphenyl	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5
2,6-Dimethylnaphthalene	U	2.4	U	2.4	U	2.5	U	2.5	U	2.4
Acenaphthylene	U	2.5	U	2.5	U	2.6	U	2.6	U	2.5
Acenaphthene	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5
Dibenzofuran	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3
Fluorene	U	2.3	U	2.3	U	2.4	U	2.4	U	2.3
Phenanthrene	U	2.1	U	2.1	U	2.2	U	2.2	U	2.1
Anthracene	U	2.1	U	2.1	U	2.2	U	2.2	U	2.1
Carbazole	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3
Fluoranthene	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9
Pyrene	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9
Benzo[a]anthracene	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7
Chrysene	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7
Benzo[b]fluoranthene	U	1.5	U	1.5	U	1.6	U	1.6	U	1.5
Benzo[k]fluoranthene	U	1.5	U	1.5	U	1.6	U	1.6	U	1.5
Benzo[e]pyrene	U	1.5	U	1.5	U	1.6	U	1.6	U	1.5
Benzo[a]pyrene	U	1.5	U	1.5	U	1.6	U	1.6	U	1.5
Indeno(1,2,3-c,d)pyrene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4
Dibenzo[a,h]anthracene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4
Benzo[g,h,i]perylene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4

COC: 01/15/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

ERTC 2/28/02

01-15-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 1/15/02											Date Sampled 1/15/02
Sample No.	06180		06181		06182		06183		06184		Sample No.
Sampling Location	Location C		Location D		Location P		Location S		Location E		Sampling Location
Volume (L)	503		504		480		480		480		Volume (L)
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Compound Name
Naphthalene	U	2.8	U	2.8	U	3.0	U	3.0	U	3.0	Naphthalene
2-Methylnaphthalene	U	2.6	U	2.6	U	2.7	U	2.7	U	2.7	2-Methylnaphthalene
1-Methylnaphthalene	U	2.6	U	2.6	U	2.7	U	2.7	U	2.7	1-Methylnaphthalene
Biphenyl	U	2.4	U	2.4	U	2.5	U	2.5	U	2.5	Biphenyl
2,6-Dimethylnaphthalene	U	2.3	U	2.3	U	2.4	U	2.4	U	2.4	2,6-Dimethylnaphthalene
Acenaphthylene	U	2.4	U	2.4	U	2.5	U	2.5	U	2.5	Acenaphthylene
Acenaphthene	U	2.4	U	2.4	U	2.5	U	2.5	U	2.5	Acenaphthene
Dibenzofuran	U	2.2	U	2.2	U	2.3	U	2.3	U	2.3	Dibenzofuran
Fluorene	U	2.2	U	2.2	U	2.3	U	2.3	U	2.3	Fluorene
Phenanthrene	U	2.0	U	2.0	U	2.1	U	2.1	U	2.1	Phenanthrene
Anthracene	U	2.0	U	2.0	U	2.1	U	2.1	U	2.1	Anthracene
Carbazole	U	2.2	U	2.2	U	2.3	U	2.3	U	2.3	Carbazole
Fluoranthene	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	Fluoranthene
Pyrene	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	Pyrene
Benzo[a]anthracene	U	1.6	U	1.6	U	1.7	U	1.7	U	1.7	Benzo[a]anthracene
Chrysene	U	1.6	U	1.6	U	1.7	U	1.7	U	1.7	Chrysene
Benzo[b]fluoranthene	U	1.4	U	1.4	U	1.5	U	1.5	U	1.5	Benzo[b]fluoranthene
Benzo[k]fluoranthene	U	1.4	U	1.4	U	1.5	U	1.5	U	1.5	Benzo[k]fluoranthene
Benzo[e]pyrene	U	1.4	U	1.4	U	1.5	U	1.5	U	1.5	Benzo[e]pyrene
Benzo[a]pyrene	U	1.4	U	1.4	U	1.5	U	1.5	U	1.5	Benzo[a]pyrene
Indeno(1,2,3-c,d)pyrene	U	1.3	U	1.3	U	1.4	U	1.4	U	1.4	Indeno(1,2,3-c,d)pyrene
Dibenzo[a,h]anthracene	U	1.3	U	1.3	U	1.4	U	1.4	U	1.4	Dibenzo[a,h]anthracene
Benzo[g,h,i]perylene	U	1.3	U	1.3	U	1.4	U	1.4	U	1.4	Benzo[g,h,i]perylene

COC: 01/15/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

COC: 01/15/02-PAHs
U: Denotes not detected
J: Denotes value is estimate
UJ: Denotes MDL is extimal

01-15-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

06185 Field Blank 0		06186 Lot Blank 0	
Conc ug	MDL ug	Conc ug	MDL ug
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5

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01-15-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/31/02

Sample No.	06625		06626		06627		06628		06630	
Sampling Location	Location R		Location A		Location 3A		Location B		Location D	
Volume (L)	824.85		651.75		960		930.15		812	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.7	U	2.2	U	1.5	U	1.5	U	1.8
2-Methylnaphthalene	U	1.6	U	2.0	U	1.3	U	1.4	U	1.6
1-Methylnaphthalene	U	1.6	U	2.0	U	1.3	U	1.4	U	1.6
Biphenyl	U	1.4	U	1.8	U	1.2	U	1.3	U	1.5
2,6-Dimethylnaphthalene	U	1.4	U	1.8	U	1.2	U	1.3	U	1.4
Acenaphthylene	U	1.5	U	1.9	U	1.3	U	1.3	U	1.5
Acenaphthene	U	1.4	U	1.8	U	1.2	U	1.3	U	1.5
Dibenzofuran	U	1.3	U	1.7	U	1.1	U	1.2	U	1.3
Fluorene	U	1.3	U	1.7	U	1.2	U	1.2	U	1.4
Phenanthrene	U	1.2	U	1.6	U	1.1	U	1.1	U	1.3
Anthracene	U	1.2	U	1.6	U	1.1	U	1.1	U	1.3
Carbazole	U	1.3	U	1.7	U	1.1	U	1.2	U	1.4
Fluoranthene	U	1.1	U	1.4	U	0.95	U	0.98	U	1.1
Pyrene	U	1.1	U	1.4	U	0.95	U	0.98	U	1.1
Benzo[a]anthracene	U	0.98	U	1.2	U	0.84	U	0.86	U	0.99
Chrysene	U	0.98	U	1.2	U	0.84	U	0.86	U	0.99
Benzo[b]fluoranthene	U	0.88	U	1.1	U	0.76	U	0.78	U	0.90
Benzo[k]fluoranthene	U	0.88	U	1.1	U	0.76	U	0.78	U	0.90
Benzo[e]pyrene	U	0.88	U	1.1	U	0.76	U	0.78	U	0.90
Benzo[a]pyrene	U	0.88	U	1.1	U	0.76	U	0.78	U	0.90
Indeno(1,2,3-c,d)pyrene	U	0.81	U	1.0	U	0.69	U	0.71	U	0.82
Dibenzo[a,h]anthracene	U	0.80	U	1.0	U	0.69	U	0.71	U	0.81
Benzo[g,h,i]perylene	U	0.81	U	1.0	U	0.69	U	0.71	U	0.82

COC: 01/31/02-PAHs

ERT: 3/1/02

U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

01-31-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/31/02								
Sample No.	06631		06632		06633		06634	
Sampling Location	Location S		Location P		Location E		Location E	
Volume (L)	566.2		809.25		900.9		944.05	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	2.5	U	1.8	U	1.6	U	1.5
2-Methylnaphthalene	U	2.3	U	1.6	U	1.4	U	1.4
1-Methylnaphthalene	U	2.3	U	1.6	U	1.4	U	1.4
Biphenyl	U	2.1	U	1.5	U	1.3	U	1.3
2,6-Dimethylnaphthalene	U	2.1	U	1.5	U	1.3	U	1.2
Acenaphthylene	U	2.1	U	1.5	U	1.3	U	1.3
Acenaphthene	U	2.1	U	1.5	U	1.3	U	1.3
Dibenzofuran	U	1.9	U	1.3	U	1.2	U	1.2
Fluorene	U	2.0	U	1.4	U	1.2	U	1.2
Phenanthrene	U	1.8	U	1.3	U	1.1	U	1.1
Anthracene	U	1.8	U	1.3	U	1.1	U	1.1
Carbazole	U	1.9	U	1.4	U	1.2	U	1.2
Fluoranthene	U	1.6	U	1.1	U	1.0	U	0.96
Pyrene	U	1.6	U	1.1	U	1.0	U	0.96
Benzo[a]anthracene	U	1.4	U	0.99	U	0.89	U	0.85
Chrysene	U	1.4	U	0.99	U	0.89	U	0.85
Benzo[b]fluoranthene	U	1.3	U	0.90	U	0.81	U	0.77
Benzo[k]fluoranthene	U	1.3	U	0.90	U	0.81	U	0.77
Benzo[e]pyrene	U	1.3	U	0.90	U	0.81	U	0.77
Benzo[a]pyrene	U	1.3	U	0.90	U	0.81	U	0.77
Indeno(1,2,3-c,d)pyrene	U	1.2	U	0.82	U	0.74	U	0.70
Dibenzo[a,h]anthracene	U	1.2	U	0.82	U	0.73	U	0.70
Benzo[g,h,i]perylene	U	1.2	U	0.82	U	0.74	U	0.70

COC: 01/31/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

01-31-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/31/02				
Sample No.	06635		06636	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 01/31/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

01-31-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/22/02										
Sample No.	wtc-06275		wtc-06276		wtc-06277		wtc-06278		wtc-06279	
Sampling Location	Location R		Location A		Location 3A		Location 3A		Location B	
Volume (L)	468		419.25		468		474		492	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	3.1	U	3.4	U	3.1	U	3.0	U	2.9
2-Methylnaphthalene	U	2.8	U	3.1	U	2.8	U	2.7	U	2.6
1-Methylnaphthalene	U	2.8	U	3.1	U	2.8	U	2.7	U	2.6
Biphenyl	U	2.5	U	2.8	U	2.5	U	2.5	U	2.4
2,6-Dimethylnaphthalene	U	2.5	U	2.8	U	2.5	U	2.5	U	2.4
Acenaphthylene	U	2.6	U	2.9	U	2.6	U	2.5	U	2.5
Acenaphthene	U	2.5	U	2.8	U	2.5	U	2.5	U	2.4
Dibenzofuran	U	2.3	U	2.6	U	2.3	U	2.3	U	2.2
Fluorene	U	2.4	U	2.6	U	2.4	U	2.3	U	2.2
Phenanthrene	U	2.2	U	2.5	U	2.2	U	2.2	U	2.1
Anthracene	U	2.2	U	2.5	U	2.2	U	2.2	U	2.1
Carbazole	U	2.3	U	2.6	U	2.3	U	2.3	U	2.2
Fluoranthene	U	1.9	U	2.2	U	1.9	U	1.9	U	1.8
Pyrene	U	1.9	U	2.2	U	1.9	U	1.9	U	1.8
Benzo[a]anthracene	U	1.7	U	1.9	U	1.7	U	1.7	U	1.6
Chrysene	U	1.7	U	1.9	U	1.7	U	1.7	U	1.6
Benzo[b]fluoranthene	U	1.6	U	1.7	U	1.6	U	1.5	U	1.5
Benzo[k]fluoranthene	U	1.6	U	1.7	U	1.6	U	1.5	U	1.5
Benzo[e]pyrene	U	1.6	U	1.7	U	1.6	U	1.5	U	1.5
Benzo[a]pyrene	U	1.6	U	1.7	U	1.6	U	1.5	U	1.5
Indeno(1,2,3-c,d)pyrene	U	1.4	U	1.6	U	1.4	U	1.4	U	1.4
Dibenzo[a,h]anthracene	U	1.4	U	1.6	U	1.4	U	1.4	U	1.3
Benzo[g,h,i]perylene	U	1.4	U	1.6	U	1.4	U	1.4	U	1.4

COC: wtc-01/22/02-PAHs
ERT: 3/1/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

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Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/22/02											Date Sampled 1/22/02
Sample No.	wtc-06280		wtc-06281		wtc-06282		wtc-06283		wtc-06284		Sample No.
Sampling Location	Location C		Location D		Location P		Location S		Location E		Sampling Location
Volume (L)	468		480		480		474		444		Volume (L)
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Compound Name
Naphthalene	U	3.1	U	3.0	U	3.0	U	3.0	U	3.2	Naphthalene
2-Methylnaphthalene	U	2.8	U	2.7	U	2.7	U	2.7	U	2.9	2-Methylnaphthalene
1-Methylnaphthalene	U	2.8	U	2.7	U	2.7	U	2.7	U	2.9	1-Methylnaphthalene
Biphenyl	U	2.5	U	2.5	U	2.5	U	2.5	U	2.7	Biphenyl
2,6-Dimethylnaphthalene	U	2.5	U	2.4	U	2.4	U	2.5	U	2.6	2,6-Dimethylnaphthalene
Acenaphthylene	U	2.6	U	2.5	U	2.5	U	2.5	U	2.7	Acenaphthylene
Acenaphthene	U	2.5	U	2.5	U	2.5	U	2.5	U	2.7	Acenaphthene
Dibenzofuran	U	2.3	U	2.3	U	2.3	U	2.3	U	2.5	Dibenzofuran
Fluorene	U	2.4	U	2.3	U	2.3	U	2.3	U	2.5	Fluorene
Phenanthrene	U	2.2	U	2.1	U	2.1	U	2.2	U	2.3	Phenanthrene
Anthracene	U	2.2	U	2.1	U	2.1	U	2.2	U	2.3	Anthracene
Carbazole	U	2.3	U	2.3	U	2.3	U	2.3	U	2.5	Carbazole
Fluoranthene	U	1.9	U	1.9	U	1.9	U	1.9	U	2.0	Fluoranthene
Pyrene	U	1.9	U	1.9	U	1.9	U	1.9	U	2.0	Pyrene
Benzo[a]anthracene	U	1.7	U	1.7	U	1.7	U	1.7	U	1.8	Benzo[a]anthracene
Chrysene	U	1.7	U	1.7	U	1.7	U	1.7	U	1.8	Chrysene
Benzo[b]fluoranthene	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	Benzo[b]fluoranthene
Benzo[k]fluoranthene	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	Benzo[k]fluoranthene
Benzo[e]pyrene	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	Benzo[e]pyrene
Benzo[a]pyrene	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	Benzo[a]pyrene
Indeno(1,2,3-c,d)pyrene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5	Indeno(1,2,3-c,d)pyrene
Dibenzo[a,h]anthracene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5	Dibenzo[a,h]anthracene
Benzo[g,h,i]perylene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5	Benzo[g,h,i]perylene

COC: wtc-01/22/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

COC: wtc-01/22/02-PAHs
U: Denotes not detected
J: Denotes value is estimate
UJ: Denotes MDL is estimat

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Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

wtc-06285 Field Blank 0		wtc-06286 Lot Blank 0	
Conc ug	MDL ug	Conc ug	MDL ug
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5

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Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/25/02										
Sample No.	06325		06326		06327		06328		06329	
Sampling Location	Location R		Location A		Location 3A		Location 3A		Location B	
Volume (L)	468		468		480		480		480	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	3.1	U	3.1	U	3.0	U	3.0	U	3.0
2-Methylnaphthalene	U	2.8	U	2.8	U	2.7	U	2.7	U	2.7
1-Methylnaphthalene	U	2.8	U	2.8	U	2.7	U	2.7	U	2.7
Biphenyl	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5
2,6-Dimethylnaphthalene	U	2.5	U	2.5	U	2.4	U	2.4	U	2.4
Acenaphthylene	U	2.6	U	2.6	U	2.5	U	2.5	U	2.5
Acenaphthene	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5
Dibenzofuran	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3
Fluorene	U	2.4	U	2.4	U	2.3	U	2.3	U	2.3
Phenanthrene	U	2.2	U	2.2	U	2.1	U	2.1	U	2.1
Anthracene	U	2.2	U	2.2	U	2.1	U	2.1	U	2.1
Carbazole	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3
Fluoranthene	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9
Pyrene	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9
Benzo[a]anthracene	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7
Chrysene	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7
Benzo[b]fluoranthene	U	1.6	U	1.6	U	1.5	U	1.5	U	1.5
Benzo[k]fluoranthene	U	1.6	U	1.6	U	1.5	U	1.5	U	1.5
Benzo[e]pyrene	U	1.6	U	1.6	U	1.5	U	1.5	U	1.5
Benzo[a]pyrene	U	1.6	U	1.6	U	1.5	U	1.5	U	1.5
Indeno(1,2,3-c,d)pyrene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4
Dibenzo[a,h]anthracene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4
Benzo[g,h,i]perylene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4

COC: 01/25/02-PAH ERT: 3/1/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

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Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/25/02											Date Sampled 1/25/02
Sample No.	06330		06331		06332		06333		06334		Sample No.
Sampling Location	Location C		Location D		Location P		Location S		Location E		Sampling Location
Volume (L)	480		480		480		504		480		Volume (L)
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Compound Name
Naphthalene	U	3.0	U	3.0	U	3.0	U	2.8	U	3.0	Naphthalene
2-Methylnaphthalene	U	2.7	U	2.7	U	2.7	U	2.6	U	2.7	2-Methylnaphthalene
1-Methylnaphthalene	U	2.7	U	2.7	U	2.7	U	2.6	U	2.7	1-Methylnaphthalene
Biphenyl	U	2.5	U	2.5	U	2.5	U	2.4	U	2.5	Biphenyl
2,6-Dimethylnaphthalene	U	2.4	U	2.4	U	2.4	U	2.3	U	2.4	2,6-Dimethylnaphthalene
Acenaphthylene	U	2.5	U	2.5	U	2.5	U	2.4	U	2.5	Acenaphthylene
Acenaphthene	U	2.5	U	2.5	U	2.5	U	2.4	U	2.5	Acenaphthene
Dibenzofuran	U	2.3	U	2.3	U	2.3	U	2.2	U	2.3	Dibenzofuran
Fluorene	U	2.3	U	2.3	U	2.3	U	2.2	U	2.3	Fluorene
Phenanthrene	U	2.1	U	2.1	U	2.1	U	2.0	U	2.1	Phenanthrene
Anthracene	U	2.1	U	2.1	U	2.1	U	2.0	U	2.1	Anthracene
Carbazole	U	2.3	U	2.3	U	2.3	U	2.2	U	2.3	Carbazole
Fluoranthene	U	1.9	U	1.9	U	1.9	U	1.8	U	1.9	Fluoranthene
Pyrene	U	1.9	U	1.9	U	1.9	U	1.8	U	1.9	Pyrene
Benzo[a]anthracene	U	1.7	U	1.7	U	1.7	U	1.6	U	1.7	Benzo[a]anthracene
Chrysene	U	1.7	U	1.7	U	1.7	U	1.6	U	1.7	Chrysene
Benzo[b]fluoranthene	U	1.5	U	1.5	U	1.5	U	1.4	U	1.5	Benzo[b]fluoranthene
Benzo[k]fluoranthene	U	1.5	U	1.5	U	1.5	U	1.4	U	1.5	Benzo[k]fluoranthene
Benzo[e]pyrene	U	1.5	U	1.5	U	1.5	U	1.4	U	1.5	Benzo[e]pyrene
Benzo[a]pyrene	U	1.5	U	1.5	U	1.5	U	1.4	U	1.5	Benzo[a]pyrene
Indeno(1,2,3-c,d)pyrene	U	1.4	U	1.4	U	1.4	U	1.3	U	1.4	Indeno(1,2,3-c,d)pyrene
Dibenzo[a,h]anthracene	U	1.4	U	1.4	U	1.4	U	1.3	U	1.4	Dibenzo[a,h]anthracene
Benzo[g,h,i]perylene	U	1.4	U	1.4	U	1.4	U	1.3	U	1.4	Benzo[g,h,i]perylene

COC: 01/25/02-PAH
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

COC: 01/25/02-PAH
U: Denotes not detected
J: Denotes value is estimate
UJ: Denotes MDL is estimat

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Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

06335 Field Blank 0		06336 Lot Blank 0	
Conc ug	MDL ug	Conc ug	MDL ug
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5

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Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/29/02

Sample No.	06375		06376		06377		06378		06379	
Sampling Location	Location R		Location A		Location 3A		Location B		Location C	
Volume (L)	936		936		795.6		936		904.8	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.5	U	1.8	U	1.5	U	1.6
2-Methylnaphthalene	U	1.4	U	1.4	U	1.6	U	1.4	U	1.4
1-Methylnaphthalene	U	1.4	U	1.4	U	1.6	U	1.4	U	1.4
Biphenyl	U	1.3	U	1.3	U	1.5	U	1.3	U	1.3
2,6-Dimethylnaphthalene	U	1.3	U	1.3	U	1.5	U	1.3	U	1.3
Acenaphthylene	U	1.3	U	1.3	U	1.5	U	1.3	U	1.3
Acenaphthene	U	1.3	U	1.3	U	1.5	U	1.3	U	1.3
Dibenzofuran	U	1.2	U	1.2	U	1.4	U	1.2	U	1.2
Fluorene	U	1.2	U	1.2	U	1.4	U	1.2	U	1.2
Phenanthrene	U	1.1	U	1.1	U	1.3	U	1.1	U	1.1
Anthracene	U	1.1	U	1.1	U	1.3	U	1.1	U	1.1
Carbazole	U	1.2	U	1.2	U	1.4	U	1.2	U	1.2
Fluoranthene	U	0.97	U	0.97	U	1.1	U	0.97	U	1.0
Pyrene	U	0.97	U	0.97	U	1.1	U	0.97	U	1.0
Benzo[a]anthracene	U	0.86	U	0.86	U	1.0	U	0.86	U	0.89
Chrysene	U	0.86	U	0.86	U	1.0	U	0.86	U	0.89
Benzo[b]fluoranthene	U	0.78	U	0.78	U	0.91	U	0.78	U	0.80
Benzo[k]fluoranthene	U	0.78	U	0.78	U	0.91	U	0.78	U	0.80
Benzo[e]pyrene	U	0.78	U	0.78	U	0.91	U	0.78	U	0.80
Benzo[a]pyrene	U	0.78	U	0.78	U	0.91	U	0.78	U	0.80
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.71	U	0.84	U	0.71	U	0.73
Dibenzo[a,h]anthracene	U	0.70	U	0.70	U	0.83	U	0.70	U	0.73
Benzo[g,h,i]perylene	U	0.71	U	0.71	U	0.84	U	0.71	U	0.73

COC: 01/29/02-PAHs ERT: 3/1/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

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Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/29/02										
Sample No.	06380		06381		06382		06383		06384	
Sampling Location	Location D		Location S		Location P		Location E		Location E	
Volume (L)	934.18		936		936		936		402.8	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.5	U	1.5	U	1.5	U	3.6
2-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.4	U	3.2
1-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.4	U	3.2
Biphenyl	U	1.3	U	1.3	U	1.3	U	1.3	U	3.0
2,6-Dimethylnaphthalene	U	1.3	U	1.3	U	1.3	U	1.3	U	2.9
Acenaphthylene	U	1.3	U	1.3	U	1.3	U	1.3	U	3.0
Acenaphthene	U	1.3	U	1.3	U	1.3	U	1.3	U	3.0
Dibenzofuran	U	1.2	U	1.2	U	1.2	U	1.2	U	2.7
Fluorene	U	1.2	U	1.2	U	1.2	U	1.2	U	2.7
Phenanthrene	U	1.1	U	1.1	U	1.1	U	1.1	U	2.6
Anthracene	U	1.1	U	1.1	U	1.1	U	1.1	U	2.6
Carbazole	U	1.2	U	1.2	U	1.2	U	1.2	U	2.7
Fluoranthene	U	0.97	U	0.97	U	0.97	U	0.97	U	2.3
Pyrene	U	0.97	U	0.97	U	0.97	U	0.97	U	2.3
Benzo[a]anthracene	U	0.86	U	0.86	U	0.86	U	0.86	U	2.0
Chrysene	U	0.86	U	0.86	U	0.86	U	0.86	U	2.0
Benzo[b]fluoranthene	U	0.78	U	0.78	U	0.78	U	0.78	U	1.8
Benzo[k]fluoranthene	U	0.78	U	0.78	U	0.78	U	0.78	U	1.8
Benzo[e]pyrene	U	0.78	U	0.78	U	0.78	U	0.78	U	1.8
Benzo[a]pyrene	U	0.78	U	0.78	U	0.78	U	0.78	U	1.8
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.71	U	0.71	U	0.71	U	1.6
Dibenzo[a,h]anthracene	U	0.71	U	0.70	U	0.70	U	0.70	U	1.6
Benzo[g,h,i]perylene	U	0.71	U	0.71	U	0.71	U	0.71	U	1.6

COC: 01/29/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

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Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/29/02				
Sample No.	06385		06386	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 01/29/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

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Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/18/02										
Sample No.	06225		06226		06227		06228		06229	
Sampling Location	Location R		Location A		Location 3A		Location B		Location B	
Volume (L)	480		480		480		480		480	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0
2-Methylnaphthalene	U	2.7	U	2.7	U	2.7	U	2.7	U	2.7
1-Methylnaphthalene	U	2.7	U	2.7	U	2.7	U	2.7	U	2.7
Biphenyl	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5
2,6-Dimethylnaphthalene	U	2.4	U	2.4	U	2.4	U	2.4	U	2.4
Acenaphthylene	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5
Acenaphthene	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5
Dibenzofuran	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3
Fluorene	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3
Phenanthrene	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1
Anthracene	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1
Carbazole	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3
Fluoranthene	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9
Pyrene	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9
Benzo[a]anthracene	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7
Chrysene	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7
Benzo[b]fluoranthene	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5
Benzo[k]fluoranthene	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5
Benzo[e]pyrene	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5
Benzo[a]pyrene	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5
Indeno(1,2,3-c,d)pyrene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4
Dibenzo[a,h]anthracene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4
Benzo[g,h,i]perylene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4

COC: 01/18/02-PAHs ERT: 3/1/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

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Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 1/18/02									Date Sampled 1/18/02
Sample No.	06230		06231		06233		06234		Sample No.
Sampling Location	Location C		Location D		Location S		Location E		Sampling Location
Volume (L)	480		480		480		480		Volume (L)
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Compound Name
Naphthalene	U	3.0	U	3.0	U	3.0	U	3.0	Naphthalene
2-Methylnaphthalene	U	2.7	U	2.7	U	2.7	U	2.7	2-Methylnaphthalene
1-Methylnaphthalene	U	2.7	U	2.7	U	2.7	U	2.7	1-Methylnaphthalene
Biphenyl	U	2.5	U	2.5	U	2.5	U	2.5	Biphenyl
2,6-Dimethylnaphthalene	U	2.4	U	2.4	U	2.4	U	2.4	2,6-Dimethylnaphthalene
Acenaphthylene	U	2.5	U	2.5	U	2.5	U	2.5	Acenaphthylene
Acenaphthene	U	2.5	U	2.5	U	2.5	U	2.5	Acenaphthene
Dibenzofuran	U	2.3	U	2.3	U	2.3	U	2.3	Dibenzofuran
Fluorene	U	2.3	U	2.3	U	2.3	U	2.3	Fluorene
Phenanthrene	U	2.1	U	2.1	U	2.1	U	2.1	Phenanthrene
Anthracene	U	2.1	U	2.1	U	2.1	U	2.1	Anthracene
Carbazole	U	2.3	U	2.3	U	2.3	U	2.3	Carbazole
Fluoranthene	U	1.9	U	1.9	U	1.9	U	1.9	Fluoranthene
Pyrene	U	1.9	U	1.9	U	1.9	U	1.9	Pyrene
Benzo[a]anthracene	U	1.7	U	1.7	U	1.7	U	1.7	Benzo[a]anthracene
Chrysene	U	1.7	U	1.7	U	1.7	U	1.7	Chrysene
Benzo[b]fluoranthene	U	1.5	U	1.5	U	1.5	U	1.5	Benzo[b]fluoranthene
Benzo[k]fluoranthene	U	1.5	U	1.5	U	1.5	U	1.5	Benzo[k]fluoranthene
Benzo[e]pyrene	U	1.5	U	1.5	U	1.5	U	1.5	Benzo[e]pyrene
Benzo[a]pyrene	U	1.5	U	1.5	U	1.5	U	1.5	Benzo[a]pyrene
Indeno(1,2,3-c,d)pyrene	U	1.4	U	1.4	U	1.4	U	1.4	Indeno(1,2,3-c,d)pyrene
Dibenzo[a,h]anthracene	U	1.4	U	1.4	U	1.4	U	1.4	Dibenzo[a,h]anthracene
Benzo[g,h,i]perylene	U	1.4	U	1.4	U	1.4	U	1.4	Benzo[g,h,i]perylene

COC: 01/18/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

COC: 01/18/02-PAHs
U: Denotes not detected
J: Denotes value is estimate
UJ: Denotes MDL is estimat

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Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

06235 Field Blank 0		06236 Lot Blank 0	
Conc ug	MDL ug	Conc ug	MDL ug
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5
U	7.5	U	7.5

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Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 02/05/02										
Sample No.	06501		06502		06503		06504		06505	
Sampling Location	Location R		Location A		Location 3A		Location B		Location C	
Volume (L)	920		842.4		875.88		766.35		839.8	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.6	U	1.7	U	1.6	U	1.9	U	1.7
2-Methylnaphthalene	U	1.4	U	1.5	U	1.5	U	1.7	U	1.5
1-Methylnaphthalene	U	1.4	U	1.5	U	1.5	U	1.7	U	1.5
Biphenyl	U	1.3	U	1.4	U	1.4	U	1.6	U	1.4
2,6-Dimethylnaphthalene	U	1.3	U	1.4	U	1.3	U	1.5	U	1.4
Acenaphthylene	U	1.3	U	1.4	U	1.4	U	1.6	U	1.4
Acenaphthene	U	1.3	U	1.4	U	1.4	U	1.6	U	1.4
Dibenzofuran	U	1.2	U	1.3	U	1.2	U	1.4	U	1.3
Fluorene	U	1.2	U	1.3	U	1.3	U	1.4	U	1.3
Phenanthrene	U	1.1	U	1.2	U	1.2	U	1.3	U	1.2
Anthracene	U	1.1	U	1.2	U	1.2	U	1.3	U	1.2
Carbazole	U	1.2	U	1.3	U	1.3	U	1.4	U	1.3
Fluoranthene	U	0.99	U	1.1	U	1.0	U	1.2	U	1.1
Pyrene	U	0.99	U	1.1	U	1.0	U	1.2	U	1.1
Benzo[a]anthracene	U	0.87	U	0.95	U	0.92	U	1.0	U	0.96
Chrysene	U	0.87	U	0.95	U	0.92	U	1.0	U	0.96
Benzo[b]fluoranthene	U	0.79	U	0.86	U	0.83	U	0.95	U	0.87
Benzo[k]fluoranthene	U	0.79	U	0.86	U	0.83	U	0.95	U	0.87
Benzo[e]pyrene	U	0.79	U	0.86	U	0.83	U	0.95	U	0.87
Benzo[a]pyrene	U	0.79	U	0.86	U	0.83	U	0.95	U	0.87
Indeno(1,2,3-c,d)pyrene	U	0.72	U	0.79	U	0.76	U	0.87	U	0.79
Dibenzo[a,h]anthracene	U	0.72	U	0.78	U	0.75	U	0.86	U	0.79
Benzo[g,h,i]perylene	U	0.72	U	0.79	U	0.76	U	0.87	U	0.79

COC: 02/05/02-PAHs ERT: 3/4/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-05-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 2/05/02										
Sample No.	06506		06507		06508		06509		06510	
Sampling Location	Location D		Location S		Location S		Location P		Location E	
Volume (L)	780.9		818.55		900		910.35		334.95	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.8	U	1.8	U	1.6	U	1.6	U	4.3
2-Methylnaphthalene	U	1.7	U	1.6	U	1.4	U	1.4	U	3.9
1-Methylnaphthalene	U	1.7	U	1.6	U	1.4	U	1.4	U	3.9
Biphenyl	U	1.5	U	1.5	U	1.3	U	1.3	U	3.6
2,6-Dimethylnaphthalene	U	1.5	U	1.4	U	1.3	U	1.3	U	3.5
Acenaphthylene	U	1.5	U	1.5	U	1.3	U	1.3	U	3.6
Acenaphthene	U	1.5	U	1.5	U	1.3	U	1.3	U	3.6
Dibenzofuran	U	1.4	U	1.3	U	1.2	U	1.2	U	3.3
Fluorene	U	1.4	U	1.3	U	1.2	U	1.2	U	3.3
Phenanthrene	U	1.3	U	1.3	U	1.1	U	1.1	U	3.1
Anthracene	U	1.3	U	1.3	U	1.1	U	1.1	U	3.1
Carbazole	U	1.4	U	1.3	U	1.2	U	1.2	U	3.3
Fluoranthene	U	1.2	U	1.1	U	1.0	U	1.0	U	2.7
Pyrene	U	1.2	U	1.1	U	1.0	U	1.0	U	2.7
Benzo[a]anthracene	U	1.0	U	0.98	U	0.89	U	0.88	U	2.4
Chrysene	U	1.0	U	0.98	U	0.89	U	0.88	U	2.4
Benzo[b]fluoranthene	U	0.93	U	0.89	U	0.81	U	0.80	U	2.2
Benzo[k]fluoranthene	U	0.93	U	0.89	U	0.81	U	0.80	U	2.2
Benzo[e]pyrene	U	0.93	U	0.89	U	0.81	U	0.80	U	2.2
Benzo[a]pyrene	U	0.93	U	0.89	U	0.81	U	0.80	U	2.2
Indeno(1,2,3-c,d)pyrene	U	0.85	U	0.81	U	0.74	U	0.73	U	2.0
Dibenzo[a,h]anthracene	U	0.84	U	0.81	U	0.73	U	0.72	U	2.0
Benzo[g,h,i]perylene	U	0.85	U	0.81	U	0.74	U	0.73	U	2.0

COC: 02/05/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-05-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 2/05/02				
Sample No.	06511		06512	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 02/05/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-05-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 02/08/02

Sample No.	06513		06514		06515		06516		06517	
Sampling Location	Location R		Location A		Location 3A		Location B		Location C	
Volume (L)	932.2		878.88		948		797.55		936	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.6	U	1.5	U	1.8	U	1.5
2-Methylnaphthalene	U	1.4	U	1.5	U	1.4	U	1.6	U	1.4
1-Methylnaphthalene	U	1.4	U	1.5	U	1.4	U	1.6	U	1.4
Biphenyl	U	1.3	U	1.4	U	1.3	U	1.5	U	1.3
2,6-Dimethylnaphthalene	U	1.3	U	1.3	U	1.2	U	1.5	U	1.3
Acenaphthylene	U	1.3	U	1.4	U	1.3	U	1.5	U	1.3
Acenaphthene	U	1.3	U	1.4	U	1.3	U	1.5	U	1.3
Dibenzofuran	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2
Fluorene	U	1.2	U	1.3	U	1.2	U	1.4	U	1.2
Phenanthrene	U	1.1	U	1.2	U	1.1	U	1.3	U	1.1
Anthracene	U	1.1	U	1.2	U	1.1	U	1.3	U	1.1
Carbazole	U	1.2	U	1.3	U	1.2	U	1.4	U	1.2
Fluoranthene	U	0.97	U	1.0	U	0.96	U	1.1	U	0.97
Pyrene	U	0.97	U	1.0	U	0.96	U	1.1	U	0.97
Benzo[a]anthracene	U	0.86	U	0.92	U	0.85	U	1.0	U	0.86
Chrysene	U	0.86	U	0.92	U	0.85	U	1.0	U	0.86
Benzo[b]fluoranthene	U	0.78	U	0.83	U	0.77	U	0.91	U	0.78
Benzo[k]fluoranthene	U	0.78	U	0.83	U	0.77	U	0.91	U	0.78
Benzo[e]pyrene	U	0.78	U	0.83	U	0.77	U	0.91	U	0.78
Benzo[a]pyrene	U	0.78	U	0.83	U	0.77	U	0.91	U	0.78
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.76	U	0.70	U	0.83	U	0.71
Dibenzo[a,h]anthracene	U	0.71	U	0.75	U	0.70	U	0.83	U	0.70
Benzo[g,h,i]perylene	U	0.71	U	0.76	U	0.70	U	0.83	U	0.71

COC: 02/08/02-PAHs ERT: 3/4/02

U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-08-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 2/08/02										
Sample No.	06518		06519		06520		06521		06522	
Sampling Location	Location D		Location S		Location S		Location P		Location E	
Volume (L)	914.43		900		871.65		954		465.5	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.6	U	1.6	U	1.6	U	1.5	U	3.1
2-Methylnaphthalene	U	1.4	U	1.4	U	1.5	U	1.4	U	2.8
1-Methylnaphthalene	U	1.4	U	1.4	U	1.5	U	1.4	U	2.8
Biphenyl	U	1.3	U	1.3	U	1.4	U	1.2	U	2.6
2,6-Dimethylnaphthalene	U	1.3	U	1.3	U	1.3	U	1.2	U	2.5
Acenaphthylene	U	1.3	U	1.3	U	1.4	U	1.3	U	2.6
Acenaphthene	U	1.3	U	1.3	U	1.4	U	1.2	U	2.6
Dibenzofuran	U	1.2	U	1.2	U	1.3	U	1.1	U	2.3
Fluorene	U	1.2	U	1.2	U	1.3	U	1.2	U	2.4
Phenanthrene	U	1.1	U	1.1	U	1.2	U	1.1	U	2.2
Anthracene	U	1.1	U	1.1	U	1.2	U	1.1	U	2.2
Carbazole	U	1.2	U	1.2	U	1.3	U	1.2	U	2.4
Fluoranthene	U	0.99	U	1.0	U	1.0	U	0.95	U	2.0
Pyrene	U	0.99	U	1.0	U	1.0	U	0.95	U	2.0
Benzo[a]anthracene	U	0.88	U	0.89	U	0.92	U	0.84	U	1.7
Chrysene	U	0.88	U	0.89	U	0.92	U	0.84	U	1.7
Benzo[b]fluoranthene	U	0.80	U	0.81	U	0.84	U	0.76	U	1.6
Benzo[k]fluoranthene	U	0.80	U	0.81	U	0.84	U	0.76	U	1.6
Benzo[e]pyrene	U	0.80	U	0.81	U	0.84	U	0.76	U	1.6
Benzo[a]pyrene	U	0.80	U	0.81	U	0.84	U	0.76	U	1.6
Indeno(1,2,3-c,d)pyrene	U	0.73	U	0.74	U	0.76	U	0.70	U	1.4
Dibenzo[a,h]anthracene	U	0.72	U	0.73	U	0.76	U	0.69	U	1.4
Benzo[g,h,i]perylene	U	0.73	U	0.74	U	0.76	U	0.70	U	1.4

COC: 02/08/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-08-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 2/08/02				
Sample No.	06523		06524	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 02/08/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-08-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 02/12/02										
Sample No.	06525		06526		06527		06528		06529	
Sampling Location	Location R		Location R		Location A		Location 3A		Location B	
Volume (L)	850.5		936		930.15		828.75		811.3	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.7	U	1.5	U	1.5	U	1.7	U	1.8
2-Methylnaphthalene	U	1.5	U	1.4	U	1.4	U	1.6	U	1.6
1-Methylnaphthalene	U	1.5	U	1.4	U	1.4	U	1.6	U	1.6
Biphenyl	U	1.4	U	1.3	U	1.3	U	1.4	U	1.5
2,6-Dimethylnaphthalene	U	1.4	U	1.3	U	1.3	U	1.4	U	1.4
Acenaphthylene	U	1.4	U	1.3	U	1.3	U	1.5	U	1.5
Acenaphthene	U	1.4	U	1.3	U	1.3	U	1.4	U	1.5
Dibenzofuran	U	1.3	U	1.2	U	1.2	U	1.3	U	1.3
Fluorene	U	1.3	U	1.2	U	1.2	U	1.3	U	1.4
Phenanthrene	U	1.2	U	1.1	U	1.1	U	1.2	U	1.3
Anthracene	U	1.2	U	1.1	U	1.1	U	1.2	U	1.3
Carbazole	U	1.3	U	1.2	U	1.2	U	1.3	U	1.4
Fluoranthene	U	1.1	U	0.97	U	0.98	U	1.1	U	1.1
Pyrene	U	1.1	U	0.97	U	0.98	U	1.1	U	1.1
Benzo[a]anthracene	U	0.95	U	0.86	U	0.86	U	0.97	U	0.99
Chrysene	U	0.95	U	0.86	U	0.86	U	0.97	U	0.99
Benzo[b]fluoranthene	U	0.86	U	0.78	U	0.78	U	0.88	U	0.90
Benzo[k]fluoranthene	U	0.86	U	0.78	U	0.78	U	0.88	U	0.90
Benzo[e]pyrene	U	0.86	U	0.78	U	0.78	U	0.88	U	0.90
Benzo[a]pyrene	U	0.86	U	0.78	U	0.78	U	0.88	U	0.90
Indeno(1,2,3-c,d)pyrene	U	0.78	U	0.71	U	0.71	U	0.80	U	0.82
Dibenzo[a,h]anthracene	U	0.78	U	0.70	U	0.71	U	0.80	U	0.81
Benzo[g,h,i]perylene	U	0.78	U	0.71	U	0.71	U	0.80	U	0.82

COC: 02/12/02-PAHs ERT: 3/5/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-12-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 02/12/02										
Sample No.	06530		06531		06532		06533		06534	
Sampling Location	Location C		Location D		Location S		Location P		Location E	
	782.55		848		948		912.45		918.45	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.8	U	1.7	U	1.5	U	1.6	U	1.6
2-Methylnaphthalene	U	1.7	U	1.5	U	1.4	U	1.4	U	1.4
1-Methylnaphthalene	U	1.7	U	1.5	U	1.4	U	1.4	U	1.4
Biphenyl	U	1.5	U	1.4	U	1.3	U	1.3	U	1.3
2,6-Dimethylnaphthalene	U	1.5	U	1.4	U	1.2	U	1.3	U	1.3
Acenaphthylene	U	1.5	U	1.4	U	1.3	U	1.3	U	1.3
Acenaphthene	U	1.5	U	1.4	U	1.3	U	1.3	U	1.3
Dibenzofuran	U	1.4	U	1.3	U	1.2	U	1.2	U	1.2
Fluorene	U	1.4	U	1.3	U	1.2	U	1.2	U	1.2
Phenanthrene	U	1.3	U	1.2	U	1.1	U	1.1	U	1.1
Anthracene	U	1.3	U	1.2	U	1.1	U	1.1	U	1.1
Carbazole	U	1.4	U	1.3	U	1.2	U	1.2	U	1.2
Fluoranthene	U	1.2	U	1.1	U	0.96	U	1.0	U	0.99
Pyrene	U	1.2	U	1.1	U	0.96	U	1.0	U	0.99
Benzo[a]anthracene	U	1.0	U	0.95	U	0.85	U	0.88	U	0.88
Chrysene	U	1.0	U	0.95	U	0.85	U	0.88	U	0.88
Benzo[b]fluoranthene	U	0.93	U	0.86	U	0.77	U	0.80	U	0.79
Benzo[k]fluoranthene	U	0.93	U	0.86	U	0.77	U	0.80	U	0.79
Benzo[e]pyrene	U	0.93	U	0.86	U	0.77	U	0.80	U	0.79
Benzo[a]pyrene	U	0.93	U	0.86	U	0.77	U	0.80	U	0.79
Indeno(1,2,3-c,d)pyrene	U	0.85	U	0.78	U	0.70	U	0.73	U	0.72
Dibenzo[a,h]anthracene	U	0.84	U	0.78	U	0.70	U	0.72	U	0.72
Benzo[g,h,i]perylene	U	0.85	U	0.78	U	0.70	U	0.73	U	0.72

COC: 02/12/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-12-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 02/12/02				
Sample No.	06535		06536	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 02/12/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

02-12-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/21/02										
Sample No.	06563		06564		06565		06566		06567	
Sampling Location	Location R		Location E		Location P		Location S		Location D	
Volume (L)	782.8		914.43		936		936		924	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.8	U	1.6	U	1.5	U	1.5	U	1.6
2-Methylnaphthalene	U	1.6	U	1.4	U	1.4	U	1.4	U	1.4
1-Methylnaphthalene	U	1.6	U	1.4	U	1.4	U	1.4	U	1.4
Biphenyl	U	1.5	U	1.3	U	1.3	U	1.3	U	1.3
2,6-Dimethylnaphthalene	U	1.5	U	1.3	U	1.3	U	1.3	U	1.3
Acenaphthylene	U	1.5	U	1.3	U	1.3	U	1.3	U	1.3
Acenaphthene	U	1.5	U	1.3	U	1.3	U	1.3	U	1.3
Dibenzofuran	U	1.4	U	1.2	U	1.2	U	1.2	U	1.2
Fluorene	U	1.4	U	1.2	U	1.2	U	1.2	U	1.2
Phenanthrene	U	1.3	U	1.1	U	1.1	U	1.1	U	1.1
Anthracene	U	1.3	U	1.1	U	1.1	U	1.1	U	1.1
Carbazole	U	1.4	U	1.2	U	1.2	U	1.2	U	1.2
Fluoranthene	U	1.2	U	0.99	U	0.97	U	0.97	U	0.98
Pyrene	U	1.2	U	0.99	U	0.97	U	0.97	U	0.98
Benzo[a]anthracene	U	1.0	U	0.88	U	0.86	U	0.86	U	0.87
Chrysene	U	1.0	U	0.88	U	0.86	U	0.86	U	0.87
Benzo[b]fluoranthene	U	0.93	U	0.80	U	0.78	U	0.78	U	0.79
Benzo[k]fluoranthene	U	0.93	U	0.80	U	0.78	U	0.78	U	0.79
Benzo[e]pyrene	U	0.93	U	0.80	U	0.78	U	0.78	U	0.79
Benzo[a]pyrene	U	0.93	U	0.80	U	0.78	U	0.78	U	0.79
Indeno(1,2,3-c,d)pyrene	U	0.85	U	0.73	U	0.71	U	0.71	U	0.72
Dibenzo[a,h]anthracene	U	0.84	U	0.72	U	0.70	U	0.70	U	0.71
Benzo[g,h,i]perylene	U	0.85	U	0.73	U	0.71	U	0.71	U	0.72

COC: 02/21/02-PAHs ERT: 3/5/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-21-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/21/02										
Sample No.	06568		06569		06570		06571		06572	
Sampling Location	Location C		Location B		Location B		Location 3A		Location A	
	908		820.95		932.1		877.8		936	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5
2-Methylnaphthalene	U	1.4	U	1.6	U	1.4	U	1.5	U	1.4
1-Methylnaphthalene	U	1.4	U	1.6	U	1.4	U	1.5	U	1.4
Biphenyl	U	1.3	U	1.5	U	1.3	U	1.4	U	1.3
2,6-Dimethylnaphthalene	U	1.3	U	1.4	U	1.3	U	1.3	U	1.3
Acenaphthylene	U	1.3	U	1.5	U	1.3	U	1.4	U	1.3
Acenaphthene	U	1.3	U	1.5	U	1.3	U	1.4	U	1.3
Dibenzofuran	U	1.2	U	1.3	U	1.2	U	1.2	U	1.2
Fluorene	U	1.2	U	1.3	U	1.2	U	1.3	U	1.2
Phenanthrene	U	1.1	U	1.3	U	1.1	U	1.2	U	1.1
Anthracene	U	1.1	U	1.3	U	1.1	U	1.2	U	1.1
Carbazole	U	1.2	U	1.3	U	1.2	U	1.3	U	1.2
Fluoranthene	U	1.0	U	1.1	U	0.97	U	1.0	U	1.0
Pyrene	U	1.0	U	1.1	U	0.97	U	1.0	U	1.0
Benzo[a]anthracene	U	0.89	U	0.98	U	0.86	U	0.92	U	0.86
Chrysene	U	0.89	U	0.98	U	0.86	U	0.92	U	0.86
Benzo[b]fluoranthene	U	0.80	U	0.89	U	0.78	U	0.83	U	0.78
Benzo[k]fluoranthene	U	0.80	U	0.89	U	0.78	U	0.83	U	0.78
Benzo[e]pyrene	U	0.80	U	0.89	U	0.78	U	0.83	U	0.78
Benzo[a]pyrene	U	0.80	U	0.89	U	0.78	U	0.83	U	0.78
Indeno(1,2,3-c,d)pyrene	U	0.73	U	0.81	U	0.71	U	0.76	U	0.71
Dibenzo[a,h]anthracene	U	0.73	U	0.80	U	0.71	U	0.75	U	0.7
Benzo[g,h,i]perylene	U	0.73	U	0.81	U	0.71	U	0.76	U	0.71

COC: 02/21/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-21-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/21/02				
Sample No.	06573		06574	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 02/21/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-21-02PAH.xls

Air Samples - Modified Method 680 PCB results
Sampling Date 02/12/02

Sample No.	WG-7104-1P		06425		06426		06427		06428		06429		06430	
Sampling Location	Method Blank		R		R		A		3A		B		C	
Sample Volume (L)	0		6100		7198		6165		5664		5655		7125	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DcCB	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of MoCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of DiCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of TrCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of TeCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of PeCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of HxCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of HpCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of OcCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Sum of NoCBs	U	10.0	U	1.64	U	1.39	U	1.62	U	1.77	U	1.77	U	1.40
Total	0		0		0		0		0		0		0	

COC# 02/12/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 2/25/02

2-12-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/12/02

Sample No.	06431		06432		06433		06434		06435		06436	
Sampling Location	D		S		P		E		Field Blank		Lot Blank	
Sample Volume (L)	5930.5		6405		7119.5		6292.8		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of MoCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of DiCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of TrCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of TeCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of PeCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of HxCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of HpCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of OcCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Sum of NoCBs	U	1.69	U	1.56	U	1.40	U	1.59	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 02/12/02-Dioxin

Air Samples - Modified Method 680 PCB results
Sampling Date 02/05/02

Sample No.	WG-7092-1P		06401		06402		06403		06404		06405		06406	
Sampling Location	Method Blank		R		A		3A		B		C		D	
Sample Volume (L)	0		5625		6120		5640		6858.75		5865		6750	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of MoCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of DiCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of TrCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of TeCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of PeCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of HxCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of HpCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of OcCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Sum of NoCBs	U	10.0	U	1.78	U	1.63	U	1.77	U	1.46	U	1.71	U	1.48
Total	0		0		0		0		0		0		0	

COC# 02/05/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 2/25/02

2-05-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/05/02

Sample No.	06407		06408		06409		06410		06411		06412	
Sampling Location	S		S		P		E		Field Blank		Lot Blank	
Sample Volume (L)	3435		5145		5610		5085		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of MoCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of DiCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of TrCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of TeCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of PeCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of HxCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of HpCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of OcCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Sum of NoCBs	U	2.91	U	1.94	U	1.78	U	1.97	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 02/05/02-Dioxin

Air Samples - Modified Method 680 PCB results
Sampling Date 02/08/02

Sample No.	WG-7097-1P		06413		06414		06415		06416		06417		06418	
Sampling Location	Method Blank		R		A		3A		B		C		D	
Sample Volume (L)	0		7056		6465		6855		6045		5730		5535	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of MoCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of DiCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of TrCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of TeCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of PeCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of HxCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of HpCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of OcCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Sum of NoCBs	U	10.0	U	1.42	U	1.55	U	1.46	U	1.65	U	1.75	U	1.81
Total	0		0		0		0		0		0		0	

COC# 02/08/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 2/25/02

2-08-02PCBair.xls

NYC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/08/02

Sample No.	06419		06420		06421		06422		06423		06424	
Sampling Location	S		S		P		E		Field Blank		Lot Blank	
Sample Volume (L)	6165		7440		7840		5880		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of MoCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of DiCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of TrCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of TeCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of PeCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of HxCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of HpCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of OcCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Sum of NoCBs	U	1.62	U	1.34	U	1.28	U	1.70	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 02/08/02-Dioxin

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/14/02

Sample No.	WG-7106-1P		06437		06438		06439		06440		06441		06442	
Sampling Location	Method Blank		R		R		A		3A		B		C	
Sample Volume (L)	0		5730		7286.5		7440		7301.25		7063.88		6083.8	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of MoCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of DiCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of TrCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of TeCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of PeCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of HxCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of HpCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of OcCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Sum of NoCBs	U	10.0	U	1.75	U	1.37	U	1.34	U	1.37	U	1.42	U	1.64
Total	0		0		0		0		0		0		0	

COC# 02/14/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/4/02

2-14-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/14/02

Sample No.	06443		06444		06445		06446		06447		06448	
Sampling Location	D		S		P		E		Field Blank		Lot Blank	
Sample Volume (L)	5580		4980		6639.75		7005		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of MoCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of DiCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of TrCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of TeCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of PeCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of HxCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of HpCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of OcCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Sum of NoCBs	U	1.79	U	2.01	U	1.51	U	1.43	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 02/14/02-Dioxin

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/19/02

Sample No.	WG-7116-1P		06449		06450		06451		06452		06453		06454	
Sampling Location	Method Blank		R		E		P		S		D		C	
Sample Volume (L)	0		6534		7155		7018		7122.38		7335		7579.5	
Analyte	Result ng	MDL ng	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3
209-DeCB	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of MoCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of DiCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of TrCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of TeCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of PeCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of HxCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of HpCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of OcCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Sum of NoCBs	U	10.0	U	1.53	U	1.40	U	1.42	U	1.40	U	1.36	U	1.32
Total	0		0		0		0		0		0		0	

COC# 02/19/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/4/02

2-19-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/19/02

Sample No.	06455		06456		06457		06458		06459		06460	
Sampling Location	B		B		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	7335		6903		6885		7515		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Sum of MoCBs	U	1.36	U	1.45	U	1.45	3.17	1.33	U	10.0	U	10.0
Sum of DiCBs	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Sum of TrCBs	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Sum of TeCBs	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Sum of PeCBs	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Sum of HxCBs	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Sum of HpCBs	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Sum of OcCBs	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Sum of NoCBs	U	1.36	U	1.45	U	1.45	U	1.33	U	10.0	U	10.0
Total	0		0		0		3.17		0		0	

COC# 02/19/02-Dioxin

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/21/02

Sample No.	WG-7120-1P		06461		06462		06463		06464		06465		06466	
Sampling Location	Method Blank		R		E		P		S		D		C	
Sample Volume (L)	0		7305		7018		7032.5		7305		7198		7005	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DcCB	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of MoCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of DiCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of TrCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of TeCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of PeCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of HxCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of HpCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of OcCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Sum of NoCBs	U	10.0	U	1.37	U	1.42	U	1.42	U	1.37	U	1.39	U	1.43
Total	0		0		0		0		0		0		0	

COC# 02/21/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/4/02

2-21-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/21/02

Sample No.	06467		06468		06469		06470		06471		06472	
Sampling Location	B		B		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	7305		7350		7410		7316		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of MoCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of DiCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of TrCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of TeCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of PeCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of HxCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of HpCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of OcCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Sum of NoCBs	U	1.37	U	1.36	U	1.35	U	1.37	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 02/21/02-Dioxin

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 2, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0634	0637	0632
Stop Time	1446	1450	1445
Run Time (minutes)	492	493	493
Maximum Concentration (ug/m^3)	70.25	94.72	85.83
Average Concentration (ug/m^3)	34.37	37.19	37.16

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 6, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0632	0635	0629
Stop Time	1434	1438	1430
Run Time (minutes)	482	483	481
Maximum Concentration (ug/m^3)	116.07	200.02	86.01
Average Concentration (ug/m^3)	46.59	32.16	38.33

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 5, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D074
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0632	0635	0630
Stop Time	1436	1439	1433
Run Time (minutes)	484	484	483
Maximum Concentration (ug/m^3)	376.1	100.64	69.16
Average Concentration (ug/m^3)	15.99	14.68	14.27

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/06/02

File Name	NYC1218	NYC1219	NYC1220	NYC1221	NYC1223	NYC1222
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07562	A07563	A07565	A07564
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	78	25	RL	28
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/02/02

File Name	NYC1185	NYC1186	NYC1187	NYC1188	NYC1190	NYC1189
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07545	A07546	A07547	A07548
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday-Monday, March 8-11, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:45 p.m. on March 11

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 18 samples taken in and around ground zero on March 1. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for lower Manhattan to 6,623, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Staten Island Landfill:

Air (Asbestos) - Thirty-seven air samples collected on March 1 and March 2 were analyzed for asbestos. All samples were below the school re-entry standard.

Metals - Four air samples were collected on February 22 and analyzed for metals. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on March 7 and March 8 at Location "L" (northeast side of Stuyvesant High School) and Location "N" (south side of

Pier 25). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Dioxin - Ten samples were collected from February 19 at various locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

PAHs - A total of 20 samples were collected on February 14 and February 26 at various locations in Lower Manhattan. PAHs were not detected.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on March 7 and March 8 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on March 7 and March 8 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, March 11, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 AM)

Results pending.

NYC / ER (Mar 1, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 2 AM)

Results pending.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 18)

Results pending.

Fresh Kills (Feb 19)

Results pending.

Fresh Kills (Feb 20)

Results pending.

Fresh Kills (Feb 23)

Results pending.

Fresh Kills (Feb 25)

Results pending.

Fresh Kills (Feb 27)

Results pending.

Fresh Kills (Feb 28)

Results pending.

Fresh Kills (Mar 1, 0715 - 2050 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: Location W-11 is no longer being monitored since the operations in that area have ended.

Fresh Kills (Mar 2, 0740 - 2125 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-1) was not collected due to an equipment malfunction.

Fresh Kills (Feb 22) - Metals

4 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills (Mar 5) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Fresh Kills (Mar 6 - 11) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to equipment malfunctions.

Ambient Air Sampling Locations

NYC / ER (Feb 19) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Feb 14) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Feb 26) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Feb 21) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Mar 7) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
No readings taken at Location R due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station L had an average of 50.21 ug/m^3 with a maximum reading of 345.02 ug/m^3.
Station N had an average of 32.28 ug/m^3 with a maximum reading of 153.19 ug/m^3.

NYC / ER (Mar 8) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
No readings taken at Location R due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station L had an average of 163.14 ug/m^3 with a maximum reading of 229.01 ug/m^3.
Station N had an average of 132.14 ug/m^3 with a maximum reading of 308.11 ug/m^3.

NYC / ER (Mar 7) - Volatile Organics (Mobile Laboratory)

Aside from one compound detected at one of the four locations, no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 8) - Volatile Organics (Mobile Laboratory)

No volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/01/2002**
Sampling Date and Time: **3/1/02 1200 to 2359**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/01/02	TTW-01036	W	1088.5	Air	14.01	0.005	0	***†	13.33	0.0047
03/01/02	TTW-01037	E	1150.9	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	TTW-01038	S	1183	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/01/02	TTW-01039	V	1084.6	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/01/02	TTW-01040	U	997.9	Air	<7.0	<0.003	0	0	<11.43	<0.0044
03/01/02	TTW-01041	K	1162.8	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/01/02	TTW-01042	D-Dup	957.25	Air	<7.0	<0.003	0	0	<11.43	<0.0046
03/01/02	TTW-01043	D	1149.75	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	TTW-01044	C	1096.5	Air	7.64	0.003	0	0	<13.33	<0.0047
03/01/02	TTW-01045	B-Dup	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/01/02	TTW-01046	B	1226.75	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/01/02	TTW-01047	A	1174.7	Air	8.92	0.003	0	0	<13.33	<0.0044
03/01/02	TTW-01048	F	1076.25	Air	<7.0	<0.003	0	0	<13.33	<0.0048
03/01/02	TTW-01049	Q	1161.1	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/01/02	TTW-01050	J	1240.75	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/01/02	TTW-01051	N	1137.3	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/01/02	TTW-01052	M1	1188	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/01/02	TTW-01053	L	1260	Air	<7.0	<0.002	0	0	<13.33	<0.0041

Please note the sampling route has been reversed

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-01-02-pm.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/1/02 0715 to 2050

Data Validation Date: 03/5/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/01/02	LF03153	P-1	1195.10	Air	10.19	0.003	***1	***2	39.37	0.0127
03/01/02	LF03154	P-2	1060.50	Air	<7.0	<0.003	***1	*****1	26.25	0.0095
03/01/02	LF03155	P-3	1032.90	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/01/02	LF03156	P-4	1110.10	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/01/02	LF03157	P-5	1188.30	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/01/02	LF03158	P-6	1210.30	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/01/02	LF03159	P-7	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/01/02	LF03160	P-8	1074.40	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/01/02	LF03161	W-12A	1156.00	Air	7.64	0.003	0	***1	13.12	0.0044
03/01/02	LF03162	W-12B	1110.40	Air	8.92	0.003	***1	*****1	26.25	0.0091
03/01/02	LF03163	B-13	1184.90	Air	<7.0	<0.002	***1	0	13.12	0.0043
03/01/02	LF03164	B-14	1147.50	Air	7.64	0.003	0	0	<13.12	<0.0044
03/01/02	LF03166	T-15	1108.25	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/01/02	LF03167	T-16	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/01/02	LF03168	O-17	1043.20	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/01/02	LF03169	O-18	942.40	Air	<7.0	<0.003	0	0	<11.25	<0.0046
03/01/02	LF03170	O-19	1091.20	Air	<7.0	<0.003	0	0	<13.12	<0.0046
03/01/02	LF03171	MPHS-20	1162.80	Air	10.19	0.003	0	0	<13.12	<0.0043
03/01/02	LF03172	B-13 Dup	1120.30	Air	<7.0	<0.002	***2	0	26.25	0.0090
03/01/02	LF03173	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/01/02	LF03174	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-01-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/2/02 0740 to 2125

Data Validation Date: 03/5/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/02/02	LF03176	P-2	987.70	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/02/02	LF03177	P-3	1076.10	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/23/02	LF03178	P-4	543.15	Air	<7.0	<0.005	0	0	<6.56	<0.0047
03/02/02	LF03179	P-5	1110.40	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/02/02	LF03180	P-6	1166.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/02/02	LF03181	P-7	1002.85	Air	<7.0	<0.003	0	0	<11.25	<0.0043
03/02/02	LF03182	P-7 Dup	1100.55	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/02/02	LF03183	P-8	1052.70	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/02/02	LF03184	W-12A	1174.70	Air	17.83	0.006	0	0	<13.12	<0.0043
03/02/02	LF03185	W-12B	1063.30	Air	14.01	0.005	0	0	<13.12	<0.0048
03/02/02	LF03186	B-13	1123.70	Air	<7.0	<0.002	***1	0	13.12	0.0045
03/02/02	LF03187	B-14	1144.10	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/02/02	LF03188	T-15	1188.00	Air	7.64	0.002	0	0	<13.12	<0.0043
03/02/02	LF03189	T-16	1191.75	Air	14.01	0.005	0	0	<13.12	<0.0042
03/02/02	LF03190	O-17	983.23	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/02/02	LF03191	O-18	672.10	Air	<7.0	<0.004	0	0	<7.87	<0.0045
03/02/02	LF03192	O-19	988.80	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/02/02	LF03193	MPHS-20	1016.00	Air	<7.0	<0.003	0	0	<13.12	<0.0050
03/02/02	LF03194	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/02/02	LF03195	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No sample submitted for LF03175 Location P1 due to pump fault

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-02-02.xls

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0104		WTC-0105		WTC-0099	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		2780	
Date Collected		-		-		-		02/22/02		02/22/02		02/22/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.45
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.018
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.018
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.045
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.018
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.045
Calcium	ICAP	4.2	2.5	5.0	2.5	3.5	2.5	U	2.5	U	2.5	U	0.9
Chromium	ICAP	0.85	0.13	0.60	0.13	0.89	0.13	0.13	0.13	U	0.13	U	0.045
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.09
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.09
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.47	0.22
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.018
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	4.5
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.045
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.09
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	18
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.018
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.045
Sodium	ICAP	U	13	18	13	U	13	U	13	U	13	U	4.5
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.018
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.09
Zinc	ICAP	0.35	0.25	0.57	0.25	U	0.25	U	0.25	U	0.25	U	0.09

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0100		WTC-0101		WTC-0102	
Location		P-8		O-17		O-18	
Air Volume (L)		4110		6310		4580	
Date Collected		02/22/02		02/22/02		02/22/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.5	0.30	0.23	0.20	0.28	0.27
Antimony	AA-Fur	U	0.012	U	0.0079	U	0.011
Arsenic	AA-Fur	U	0.012	U	0.0079	U	0.011
Barium	ICAP	0.03	0.03	U	0.02	0.042	0.027
Beryllium	ICAP	U	0.012	U	0.0079	U	0.011
Cadmium	ICAP	U	0.03	U	0.02	U	0.027
Calcium	ICAP	12	0.61	1.3	0.40	1.8	0.55
Chromium	ICAP	U	0.03	U	0.02	U	0.027
Cobalt	ICAP	U	0.061	U	0.04	U	0.055
Copper	ICAP	0.11	0.061	U	0.04	U	0.055
Iron	ICAP	2.7	0.15	0.44	0.099	1	0.14
Lead	AA-Fur	0.10	0.012	0.016	0.0079	0.02	0.011
Magnesium	ICAP	U	3.0	U	2.0	U	2.7
Manganese	ICAP	0.063	0.03	U	0.02	U	0.027
Nickel	ICAP	U	0.061	U	0.04	U	0.055
Potassium	ICAP	U	12	U	7.9	U	11
Selenium	AA-Fur	U	0.012	U	0.0079	U	0.011
Silver	ICAP	U	0.03	U	0.02	U	0.027
Sodium	ICAP	U	3.0	U	2.0	U	2.7
Thallium	AA-Fur	U	0.012	U	0.0079	U	0.011
Vanadium	ICAP	U	0.061	U	0.04	U	0.055
Zinc	ICAP	0.13	0.061	U	0.04	U	0.055

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/19/02

Sample No.	WG7116-1			06458			06457			06456			06455			06454		
Sampling Location	Method Blank			Location A			Location 3A			B-Church & Dey St.			B-Church & Dey St.			C-Liberty St. & Church St.		
Volume (Liters)	0			7515			6885			6903			7335			7579.5		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0027	U		0.0029	U		0.0029	U		0.0027	U		0.0026
12378-PeCDD	0.0017 J		0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
123478-HxCDD	U		0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
123678-HxCDD	U		0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
123789-HxCDD	U		0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
1234678-HpCDD	U	0.0040	0.10	U		0.013	U	0.0006	0.015	U		0.014	U		0.014	U		0.013
OCDD	U	0.0136	0.20	U		0.027	U	0.0026	0.029	U		0.029	U		0.027	U		0.026
2378-TCDF	U		0.020	U		0.0027	U		0.0029	U		0.0029	U		0.0027	U		0.0026
12378-PeCDF	U	0.0022	0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
23478-PeCDF	U	0.0017	0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
123478-HxCDF	U	0.0019	0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
123678-HxCDF	U		0.10	U		0.013	0.0001 J		0.015	U		0.014	U		0.014	U		0.013
234678-HxCDF	U		0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
123789-HxCDF	U		0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
1234678-HpCDF	0.0022 J		0.10	0.0005 J		0.013	0.0003 J		0.015	0.0003 J		0.014	0.0003 J		0.014	0.0004 J		0.013
1234789-HpCDF	U		0.10	U		0.013	U		0.015	U		0.014	U		0.014	U		0.013
OCDF	U		0.20	U		0.027	U		0.029	U		0.029	U		0.027	U		0.026
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	0.0017			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			0.0003			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			0.0003			U			U			U		
Total HpCDFs	0.0022			0.0005			U			0.0003			0.0003			0.0004		
Total Adjusted Conc																		
TEQ (ND=0)	0.0009			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0399			0.0005			0.0005			0.0005			0.0005			0.0004		

COC# 02/19/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 3/06/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

2-19-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/19/02

Sample No.	06453			06450			06451			06449			06452			06459			06460		
Sampling Location	D Greenwich & Albany St.			Location E			Location P			R- TAGA			Location S			Field Blank			Lot Blank		
Volume (Liters)	7335			7155			7018			6534			7122.38			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0028	U		0.0029	U		0.0031	U		0.0028	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	U		0.10	U		0.10
123478-HxCDD	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	0.0008 J		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	0.0014 J		0.10	U		0.10
123789-HxCDD	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	U		0.10	U		0.10
1234678-HpCDD	U		0.014	U	0.0007	0.014	U	0.0007	0.014	U		0.015	U		0.014	0.0055 J		0.10	U	0.0038	0.10
OCDD	U		0.027	U	0.0019	0.028	U		0.029	U		0.031	U		0.028	U		0.20	0.0116 J		0.20
2378-TCDF	U		0.0027	U		0.0028	U		0.0029	U		0.0031	U		0.0028	U		0.020	U		0.020
12378-PeCDF	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	U		0.10	U		0.10
123478-HxCDF	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	U		0.10	U		0.10
123678-HxCDF	U		0.014	U		0.014	0.0003 J		0.014	U		0.015	U		0.014	U		0.10	U	0.0012	0.10
234678-HxCDF	U		0.014	0.0001		0.014	U		0.014	U		0.015	U		0.014	U		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	U		0.10	U		0.10
1234678-HpCDF	0.0002 J		0.014	U		0.014	0.0005 J		0.014	U	0.0004	0.015	0.0004 J		0.014	U		0.10	U		0.10
1234789-HpCDF	U		0.014	U		0.014	U		0.014	U		0.015	U		0.014	U		0.10	U		0.10
OCDF	U		0.027	U		0.028	U		0.029	U		0.031	U		0.028	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			0.0055			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			0.0001			0.0005			U			U			U			U		
Total HpCDFs	0.0002			U			0.0005			U			0.0004			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0001			0.0000		
TEQ (ND=1/2)	0.0005			0.0005			0.0005			0.0005			0.0006			0.0399			0.0401		

COC# 02/19/02 dioxin

2-19-02dioair.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/26/02										
Sample No.	06575		06576		06577		06578		06579	
Sampling Location	Location R		Location E		Location P		Location S		Location D	
Volume (L)	835.43		936		960		928.25		879.45	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.7	U	1.5	U	1.5	U	1.5	U	1.6
2-Methylnaphthalene	U	1.5	U	1.4	U	1.3	U	1.4	U	1.5
1-Methylnaphthalene	U	1.5	U	1.4	U	1.3	U	1.4	U	1.5
Biphenyl	U	1.4	U	1.3	U	1.2	U	1.3	U	1.4
2,6-Dimethylnaphthalene	U	1.4	U	1.3	U	1.2	U	1.3	U	1.3
Acenaphthylene	U	1.4	U	1.3	U	1.3	U	1.3	U	1.4
Acenaphthene	U	1.4	U	1.3	U	1.2	U	1.3	U	1.4
Dibenzofuran	U	1.3	U	1.2	U	1.1	U	1.2	U	1.2
Fluorene	U	1.3	U	1.2	U	1.2	U	1.2	U	1.3
Phenanthrene	U	1.2	U	1.1	U	1.1	U	1.1	U	1.2
Anthracene	U	1.2	U	1.1	U	1.1	U	1.1	U	1.2
Carbazole	U	1.3	U	1.2	U	1.1	U	1.2	U	1.2
Fluoranthene	U	1.1	U	0.97	U	0.95	U	0.98	U	1.0
Pyrene	U	1.1	U	0.97	U	0.95	U	0.98	U	1.0
Benzo[a]anthracene	U	0.96	U	0.86	U	0.84	U	0.87	U	0.91
Chrysene	U	0.96	U	0.86	U	0.84	U	0.87	U	0.91
Benzo[b]fluoranthene	U	0.87	U	0.78	U	0.76	U	0.78	U	0.83
Benzo[k]fluoranthene	U	0.87	U	0.78	U	0.76	U	0.78	U	0.83
Benzo[e]pyrene	U	0.87	U	0.78	U	0.76	U	0.78	U	0.83
Benzo[a]pyrene	U	0.87	U	0.78	U	0.76	U	0.78	U	0.83
Indeno(1,2,3-c,d)pyrene	U	0.80	U	0.71	U	0.69	U	0.72	U	0.76
Dibenzo[a,h]anthracene	U	0.79	U	0.70	U	0.69	U	0.71	U	0.75
Benzo[g,h,i]perylene	U	0.80	U	0.71	U	0.69	U	0.72	U	0.76

COC: 02/26/02-PAHs ERT: 3/6/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-26-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/26/02										
Sample No.	06580		06581		06582		06583		06584	
Sampling Location	Location C		Location B		Location 3A		Location A		Location A	
	760		874		936		744.58		936	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.9	U	1.6	U	1.5	U	1.9	U	1.5
2-Methylnaphthalene	U	1.7	U	1.5	U	1.4	U	1.7	U	1.4
1-Methylnaphthalene	U	1.7	U	1.5	U	1.4	U	1.7	U	1.4
Biphenyl	U	1.6	U	1.4	U	1.3	U	1.6	U	1.3
2,6-Dimethylnaphthalene	U	1.5	U	1.3	U	1.3	U	1.6	U	1.3
Acenaphthylene	U	1.6	U	1.4	U	1.3	U	1.6	U	1.3
Acenaphthene	U	1.6	U	1.4	U	1.3	U	1.6	U	1.3
Dibenzofuran	U	1.4	U	1.2	U	1.2	U	1.5	U	1.2
Fluorene	U	1.5	U	1.3	U	1.2	U	1.5	U	1.2
Phenanthrene	U	1.4	U	1.2	U	1.1	U	1.4	U	1.1
Anthracene	U	1.4	U	1.2	U	1.1	U	1.4	U	1.1
Carbazole	U	1.4	U	1.3	U	1.2	U	1.5	U	1.2
Fluoranthene	U	1.2	U	1.00	U	0.97	U	1.2	U	0.97
Pyrene	U	1.2	U	1.00	U	0.97	U	1.2	U	0.97
Benzo[a]anthracene	U	1.1	U	0.92	U	0.86	U	1.1	U	0.86
Chrysene	U	1.1	U	0.92	U	0.86	U	1.1	U	0.86
Benzo[b]fluoranthene	U	0.96	U	0.83	U	0.78	U	0.98	U	0.78
Benzo[k]fluoranthene	U	0.96	U	0.83	U	0.78	U	0.98	U	0.78
Benzo[e]pyrene	U	0.96	U	0.83	U	0.78	U	0.98	U	0.78
Benzo[a]pyrene	U	0.96	U	0.83	U	0.78	U	0.98	U	0.78
Indeno(1,2,3-c,d)pyrene	U	0.87	U	0.76	U	0.71	U	0.89	U	0.71
Dibenzo[a,h]anthracene	U	0.87	U	0.75	U	0.70	U	0.89	U	0.70
Benzo[g,h,i]perylene	U	0.87	U	0.76	U	0.71	U	0.89	U	0.71

COC: 02/26/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-26-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/26/02				
Sample No.	06585		06586	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 02/26/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-26-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/14/02

Sample No.	06537		06538		06539		06540		06541	
Sampling Location	Location R		Location R		Location A		Location 3A		Location B	
Volume (L)	828.75		960		948		914.43		869.7	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.7	U	1.5	U	1.5	U	1.6	U	1.6
2-Methylnaphthalene	U	1.6	U	1.3	U	1.4	U	1.4	U	1.5
1-Methylnaphthalene	U	1.6	U	1.3	U	1.4	U	1.4	U	1.5
Biphenyl	U	1.4	U	1.2	U	1.3	U	1.3	U	1.4
2,6-Dimethylnaphthalene	U	1.4	U	1.2	U	1.2	U	1.3	U	1.4
Acenaphthylene	U	1.5	U	1.3	U	1.3	U	1.3	U	1.4
Acenaphthene	U	1.4	U	1.2	U	1.3	U	1.3	U	1.4
Dibenzofuran	U	1.3	U	1.1	U	1.2	U	1.2	U	1.3
Fluorene	U	1.3	U	1.2	U	1.2	U	1.2	U	1.3
Phenanthrene	U	1.2	U	1.1	U	1.1	U	1.1	U	1.2
Anthracene	U	1.2	U	1.1	U	1.1	U	1.1	U	1.2
Carbazole	U	1.3	U	1.1	U	1.2	U	1.2	U	1.3
Fluoranthene	U	1.1	U	0.95	U	0.96	U	0.99	U	1.0
Pyrene	U	1.1	U	0.95	U	0.96	U	0.99	U	1.0
Benzo[a]anthracene	U	0.97	U	0.84	U	0.85	U	0.88	U	0.92
Chrysene	U	0.97	U	0.84	U	0.85	U	0.88	U	0.92
Benzo[b]fluoranthene	U	0.88	U	0.76	U	0.77	U	0.80	U	0.84
Benzo[k]fluoranthene	U	0.88	U	0.76	U	0.77	U	0.80	U	0.84
Benzo[e]pyrene	U	0.88	U	0.76	U	0.77	U	0.80	U	0.84
Benzo[a]pyrene	U	0.88	U	0.76	U	0.77	U	0.80	U	0.84
Indeno(1,2,3-c,d)pyrene	U	0.80	U	0.69	U	0.70	U	0.73	U	0.76
Dibenzo[a,h]anthracene	U	0.80	U	0.69	U	0.70	U	0.72	U	0.76
Benzo[g,h,i]perylene	U	0.80	U	0.69	U	0.70	U	0.73	U	0.76

COC: 02/14/02-PAHs ERT: 3/6/02

U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-14-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/14/02										
Sample No.	06542		06543		06544		06545		06546	
Sampling Location	Location C		Location D		Location S		Location P		Location E	
	936		744.98		948		815.68		876.9	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.9	U	1.5	U	1.8	U	1.6
2-Methylnaphthalene	U	1.4	U	1.7	U	1.4	U	1.6	U	1.5
1-Methylnaphthalene	U	1.4	U	1.7	U	1.4	U	1.6	U	1.5
Biphenyl	U	1.3	U	1.6	U	1.3	U	1.5	U	1.4
2,6-Dimethylnaphthalene	U	1.3	U	1.6	U	1.2	U	1.4	U	1.3
Acenaphthylene	U	1.3	U	1.6	U	1.3	U	1.5	U	1.4
Acenaphthene	U	1.3	U	1.6	U	1.3	U	1.5	U	1.4
Dibenzofuran	U	1.2	U	1.5	U	1.2	U	1.3	U	1.2
Fluorene	U	1.2	U	1.5	U	1.2	U	1.4	U	1.3
Phenanthrene	U	1.1	U	1.4	U	1.1	U	1.3	U	1.2
Anthracene	U	1.1	U	1.4	U	1.1	U	1.3	U	1.2
Carbazole	U	1.2	U	1.5	U	1.2	U	1.3	U	1.3
Fluoranthene	U	0.97	U	1.2	U	0.96	U	1.1	U	1.0
Pyrene	U	0.97	U	1.2	U	0.96	U	1.1	U	1.0
Benzo[a]anthracene	U	0.86	U	1.1	U	0.85	U	0.99	U	0.92
Chrysene	U	0.86	U	1.1	U	0.85	U	0.99	U	0.92
Benzo[b]fluoranthene	U	0.78	U	0.98	U	0.77	U	0.89	U	0.83
Benzo[k]fluoranthene	U	0.78	U	0.98	U	0.77	U	0.89	U	0.83
Benzo[e]pyrene	U	0.78	U	0.98	U	0.77	U	0.89	U	0.83
Benzo[a]pyrene	U	0.78	U	0.98	U	0.77	U	0.89	U	0.83
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.89	U	0.70	U	0.81	U	0.76
Dibenzo[a,h]anthracene	U	0.70	U	0.89	U	0.70	U	0.81	U	0.75
Benzo[g,h,i]perylene	U	0.71	U	0.89	U	0.70	U	0.81	U	0.76

COC: 02/14/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-14-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/14/02				
Sample No.	06547		06548	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 02/14/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-14-02PAH.xls

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 8, 2002

Location	**L**	**N**	**R***
DataRAM I.D. No.	D080	D081	-
Flow Rate (liters/minute)	2.0	2.0	-
Start Time	0641	0644	-
Stop Time	1450	1453	-
Run Time (minutes)	489	489	-
Maximum Concentration (ug/m^3)	229.01	308.11	-
Average Concentration (ug/m^3)	163.14	132.14	-

* equipment malfunction

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 7, 2002

Location	L	N	R*
DataRAM I.D. No.	D080	D081	-
Flow Rate (liters/minute)	2.0	2.0	-
Start Time	0652	0656	-
Stop Time	1500	1503	-
Run Time (minutes)	488	487	-
Maximum Concentration (ug/m^3)	345.02	153.19	-
Average Concentration (ug/m^3)	50.21	32.28	-

* equipment malfunction

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/08/02

File Name	NYC1234	NYC1235	NYC1236	NYC1237	NYC1239	NYC1238
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower	South Tower
Sample Number			A07570	A07571	A07572	A07573
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/07/02

File Name	NYC1226	NYC1227	NYC1228	NYC1229	NYC1231	NYC1230
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower	South Tower
Sample Number			A07566	A07567	A07569	A07568
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	21	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, March 12, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:45 p.m. on March 12

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 19 samples taken in and around ground zero on March 2. EPA also sampled for asbestos at two additional lower Manhattan locations on February 26, February 27, and March 1. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 6,648, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside Lower Manhattan:

Asbestos - Samples were collected from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island) on February 26, February 27, and March 1. None showed exceedances of the AHERA re-entry standard.

Staten Island Landfill:

Air (Asbestos) - Nineteen air samples collected on February 28 were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on March 9, 10, and 11 at Location "L" (northeast side of Stuyvesant High School) and Location "N" (south side of Pier 25). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on March 9, 10, and 11 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on March 9, 10, and 11 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas showed no detectable levels of VOCs.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, March 12, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 PM)

Results pending.

NYC / ER (Mar 2, 0001 - 1200 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 18)

Results pending.

Fresh Kills (Feb 19)

Results pending.

Fresh Kills (Feb 20)

Results pending.

Fresh Kills (Feb 23)

Results pending.

Fresh Kills (Feb 25)

Results pending.

Fresh Kills (Feb 27)

Results pending.

Fresh Kills (Feb 28, 0716 - 2027 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 12) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to equipment malfunctions.

Ambient Air Sampling Locations

NYC / ER (Feb 21) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Feb 24 - 25) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Feb 26 - 27) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 28) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Mar 1) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 9) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
No readings taken at Location R due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station L had an average of 110.87 ug/m^3 with a maximum reading of 241.90 ug/m^3.
Station N had an average of 75.12 ug/m^3 with a maximum reading of 397.07 ug/m^3.

NYC / ER (Mar 10) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
No readings taken at Location R due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station L had an average of 11.40 ug/m^3 with a maximum reading of 139.33 ug/m^3.
Station N had an average of 8.20 ug/m^3 with a maximum reading of 77.23 ug/m^3.

NYC / ER (Mar 11) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L and N) were below the OSHA TWA.
No readings taken at Location R due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station L had an average of 8.87 ug/m^3 with a maximum reading of 39.22 ug/m^3.
Station N had an average of 8.53 ug/m^3 with a maximum reading of 44.09 ug/m^3.

NYC / ER (Mar 9) - Volatile Organics (Mobile Laboratory)

No volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 10) - Volatile Organics (Mobile Laboratory)

No volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 11) - Volatile Organics (Mobile Laboratory)

No volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/2/02 0001 to 1200

Data Validation Date: 03/03/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/02/02	TTW-01054	W	1046.5	Air	8.92	0.003	0	0	<13.33	<0.0049
03/02/02	FB030202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/02/02	TB030202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/02/02	TTW-01055	E	969.5	Air	<7.0	<0.003	0	0	<11.43	<0.0045
03/02/02	TTW-01056	S	963.9	Air	<7.0	<0.003	0	0	<11.43	<0.0046
03/02/02	TTW-01057	V	1077.8	Air	<7.0	<0.002	0	0	<13.33	<0.0048
03/02/02	TTW-01058	U	1018.5	Air	<7.0	<0.003	0	0	<13.33	<0.0050
03/02/02	TTW-01059	K	1116.5	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/02/02	TTW-01060	D	915.25	Air	<7.0	<0.003	0	0	<11.43	<0.0048
03/02/02	TTW-01061	C-Dup	1003	Air	7.01	0.003	0	0	<11.43	<0.0044
03/02/02	TTW-01062	C	1076.1	Air	<7.0	<0.003	0	0	<11.43	<0.0041
03/02/02	TTW-01063	B	1028.5	Air	<7.0	<0.003	0	0	<11.43	<0.0043
03/02/02	TTW-01064	A	253.3	Air	<7.0	<0.011	0	0	<8.00	<0.0122
03/02/02	TTW-01065	F	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/02/02	TTW-01066	Q-Dup	983.4	Air	<7.0	<0.003	0	0	<11.43	<0.0045
03/02/02	TTW-01067	Q	1123.7	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/02/02	TTW-01068	J	986	Air	<7.0	<0.003	0	0	<11.43	<0.0045
03/02/02	TTW-01069	N	1077.8	Air	<7.0	<0.002	0	0	<13.33	<0.0048
03/02/02	TTW-01070	M1	974.1	Air	<7.0	<0.003	0	0	<11.43	<0.0045
03/02/02	TTW-01071	L	1044.45	Air	<7.0	<0.003	0	0	<13.33	<0.0049

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-02-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/28/02 0716 to 2027

Data Validation Date: 03/1/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/28/02	LF03132	P-1	1079.75	Air	<7.0	<0.003	***2	***1	39.37	0.0140
02/28/02	LF03133	P-2	1006.50	Air	<7.0	<0.003	0	0	<11.25	<0.0043
02/23/02	LF03134	P-3	1096.50	Air	<7.0	<0.003	0	0	<13.12	<0.0046
02/28/02	LF03135	P-4	828.30	Air	<7.0	<0.003	0	0	<9.84	<0.0046
02/28/02	LF03136	P-5	1159.40	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/28/02	LF03137	P-6	1084.90	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/28/02	LF03138	P-7	1016.00	Air	<7.0	<0.003	0	0	<13.12	<0.0050
02/28/02	LF03139	P-8	1142.40	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/28/02	LF03140	P-8 Dup	1144.10	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/28/02	LF03141	W-12A	1127.00	Air	78.98	0.027	0	***2	26.25	0.0090
02/28/02	LF03142	W-12B	1198.50	Air	15.29	0.005	***1	***1	26.25	0.0084
02/28/02	LF03143	B-13	1089.60	Air	15.29	0.005	0	0	<13.12	<0.0046
02/28/02	LF03144	B-14	1077.80	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/28/02	LF03145	T-15	1132.20	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/28/02	LF03146	T-16	1224.00	Air	11.46	0.004	0	0	<13.12	<0.0041
02/28/02	LF03147	O-17	1048.25	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/28/02	LF03148	O-18	1059.10	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/28/02	LF03149	O-19	1060.20	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/28/02	LF03150	MPHS-20	1169.85	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/28/02	LF03151	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/28/02	LF03152	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-28-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/2/02**
Sampling Date and Time: 2/26/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/26/02	7093-18-0152	Park Row	1344	Air	<7.0	<0.002	0	0	<16.00	<0.0046
02/26/02	7093-19-0152	Chambers Street	1262	Air	<7.0	<0.002	0	0	<13.33	<0.0041
02/26/02	7093-15-0150	I.S. 143 Manhattan	1116	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/26/02	7094-09-0140	P.S. 154 (Bronx)	1290	Air	<7.0	<0.002	0	0	<13.33	<0.0040
02/26/02	7096-12-0146	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/26/02	7095-98-0146	P.S. 274 (Brooklyn)	1328	Air	<7.0	<0.002	0	0	<16.00	<0.0046
02/26/02	7097-18-0143	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-02-26-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/6/02**
Sampling Date and Time: 2/27/02 1200 to 2400

Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/27/02	7093-18-0153	Park Row	1256	Air	<7.0	<0.002	0	0	<16.00	<0.0049
02/27/02	7093-19-0153	Chambers Street	1312	Air	<7.0	<0.002	0	0	<16.00	<0.0047
02/27/02	7093-15-0151	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/27/02	7094-09-0141	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/27/02	7096-12-0147	P.S. 199 (Queens)	1398	Air	<7.0	<0.002	0	0	<16.00	<0.0044
02/27/02	7095-98-0147	P.S. 274 (Brooklyn)	1380	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/27/02	7097-18-0144	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/6/02**
Sampling Date and Time: 3/1/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/01/02	7093-18-0155	Park Row	1354	Air	<7.0	<0.002	0	0	<15.75	<0.0045
03/01/02	7093-19-0155	Chambers Street	1382	Air	<7.0	<0.002	0	0	<15.75	<0.0044
03/01/02	7093-15-0153	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
03/01/02	7094-09-0143	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
03/01/02	7096-12-0149	P.S. 199 (Queens)	1210	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/01/02	7095-98-0149	P.S. 274 (Brooklyn)	1320	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/01/02	7097-18-0146	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-03-01-02.xls

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 11, 2002

Location	L	N	R*
DataRAM I.D. No.	D080	D081	-
Flow Rate (liters/minute)	2.0	2.0	-
Start Time	0651	0654	-
Stop Time	1455	1459	-
Run Time (minutes)	484	485	-
Maximum Concentration (ug/m^3)	39.22	44.09	-
Average Concentration (ug/m^3)	8.87	8.53	-

* equipment malfunction

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 10, 2002

Location	L	N	R*
DataRAM I.D. No.	D080	D081	-
Flow Rate (liters/minute)	1.0	1.0	-
Start Time	0652	0653	-
Stop Time	1501	1508	-
Run Time (minutes)	489	495	-
Maximum Concentration (ug/m^3)	139.33	77.23	-
Average Concentration (ug/m^3)	11.40	8.20	-

* equipment malfunction

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 9, 2002

Location	L	N	R*
DataRAM I.D. No.	D080	D081	-
Flow Rate (liters/minute)	2.0	2.0	-
Start Time	0709	0712	-
Stop Time	1502	1505	-
Run Time (minutes)	473	473	-
Maximum Concentration (ug/m^3)	241.90	397.07	-
Average Concentration (ug/m^3)	110.87	75.12	-

* equipment malfunction

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/11/02

File Name	NYC1258	NYC1259	NYC1260	NYC1261	NYC1263	NYC1262
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07582	A07583	A07584	A07585
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/10/02

File Name	NYC1250	NYC1251	NYC1252	NYC1253	NYC1255	NYC1254
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07578	A07579	A07580	A07581
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/09/02

File Name	NYC1242	NYC1243	NYC1244	NYC1245	NYC1247	NYC1246
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07574	A07575	A07577	A07576
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, March 13, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 6:00 p.m. on March 13

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 141 samples taken in and around ground zero from March 2 through March 6. EPA also sampled for asbestos at two additional lower Manhattan locations on February 21, February 24 and 25, February 28 and March 2. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 6,798, with 17 samples above the standard (11 of these were collected prior to September 30; the other six were collected on October 9, November 27, December 27, January 14, February 5 and February 11).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Air: Fixed Monitors outside Lower Manhattan:

Asbestos - Samples were collected on February 21, February 24 and 25, February 28 and March 2 from additional asbestos monitors at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard. (Note: No sample was taken at P.S. 44 on February 21.)

Staten Island Landfill:

Air (Asbestos) - A total of 40 air samples collected on February 20 and February 23 were analyzed for asbestos. All samples were below the school re-entry standard.

Bulk Dust Sampling (Asbestos) - A total of 47 bulk samples were collected from the landfill sift and barge unloading areas at the Staten Island Landfill on February 1, 8, 12, 16, 20, 22 and 26, and on March 1. One sample, collected on March 1 at the barge area (Location "B-14"), showed asbestos at 1.2%. Asbestos in all other samples was either not detected, or was less than 1%.

Ambient Air Samples:

Particulate Monitoring - EPA used portable monitors to collect samples on March 12 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on March 12 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on March 12 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas showed no detectable levels of VOCs.

Bulk Soil Sampling:

Five bulk soil samples were collected from the excavation area at ground zero on December 19 and were analysed for VOCs, semi-VOC's, pesticides, PCBs, dioxin, metals (including mercury) and cyanide.

One of the five samples contained PCBs at a level of 2.28 ppm, which is above the EPA residential cleanup guideline of 1 ppm.

The same sample also contained benzo(a)pyrene at a concentration of 25.1 ppm, which is above the EPA removal action guidance levels based on a 30-year exposure. However, when adjusted to a 1-year exposure, the level was below the EPA removal action guidance levels.

All other analytical parameters were either not detected or were below applicable EPA removal action guidance levels.

Bulk Dust Sampling (Asbestos):

Eight bulk samples were collected from the volleyball area at Pier 25 in Lower Manhattan on February 15. Asbestos was not detected in any of these samples.

One bulk sample was collected from the roof of a trailer near Warren & West Streets in Lower Manhattan on January 23. This sample contained less than 1% asbestos.

Three bulk samples were collected from Pier 6 in Lower Manhattan on January 23. Asbestos was not detected in any of these samples.

Water Sampling:

Two samples were collected on January 10 from a pool of water at the base of the excavation area at ground zero and analyzed for metals (cadmium, copper, lead, mercury, nickel and zinc), PCBs, VOCs, total petroleum hydrocarbons, hexavalent chromium, flashpoint, total suspended solids, temperature, and pH. No levels of significance were noted.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, March 13, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 PM)

Results pending.

NYC / ER (Mar 2, 1200 - 2359 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations L and M-1) were not collected due to equipment malfunctions.

NYC / ER (Mar 3, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 3, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 4, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 4, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 5, 0001 - 1142 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 5, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 6, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location M-1) was not collected due to an equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 18)

Results pending.

Fresh Kills (Feb 19)

Results pending.

Fresh Kills (Feb 20, 0739 - 2134 hrs)

All 20 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 23, 0658 - 1946 hrs)

All 20 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Feb 25)

Results pending.

Fresh Kills (Feb 27)

Results pending.

Ambient Air Sampling Locations

NYC / ER (Feb 21) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:

- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 6 samples were collected from these monitoring sites.
1 sample (Site 8) was considered invalid due to an equipment malfunction.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 24 - 25) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 13 samples were collected from these monitoring sites.
1 sample (Site 1) was not collected due to an equipment malfunction.
All of the samples were below the TEM AHERA standard.

NYC / ER (Feb 28) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 2) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 12) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 53.13 ug/m^3 with a maximum reading of 204.62 ug/m^3.
Station N had an average of 42.17 ug/m^3 with a maximum reading of 69.81 ug/m^3.
Station R had an average of 40.70 ug/m^3 with a maximum reading of 63.49 ug/m^3.

NYC / ER (Mar 12) - Volatile Organics (Mobile Laboratory)

No volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Bulk Sampling

Fresh Kills (Feb 20) - Asbestos

6 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was either not detected or at trace levels in all of the samples.

Fresh Kills (Feb 22) - Asbestos

6 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was not detected in all of the samples.

Fresh Kills (Feb 26) - Asbestos

6 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was either not detected or at less than 1% chrysotile or 1% amosite in all of the samples.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/2/02 1200 to 2359

Data Validation Date: 03/04/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
03/02/02	TTW-01072	W	1179	Air	7.64	0.002	0	0	<13.33	<0.0044
03/02/02	TTW-01073	E	1281.6	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/02/02	TTW-01074	S	1238.4	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/02/02	TTW-01075	U	1177.2	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/02/02	TTW-01076	V	1296	Air	<7.0	<0.002	0	0	<13.33	<0.0040
03/02/02	TTW-01077	K	1218	Air	9.55	0.003	0	0	<13.33	<0.0042
03/02/02	TTW-01078	D	1121.4	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/02/02	TTW-01079	C	1244.25	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/02/02	TTW-01080	C-Dup	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/02/02	TTW-01081	B	1256.4	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/02/02	TTW-01082	A	1191.6	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/02/02	TTW-01083	F	1090.8	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/02/02	TTW-01084	Q	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/02/02	TTW-01085	J	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/02/02	TTW-01086	J-Dup	1251	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/02/02	TTW-01087	N	1215	Air	<7.0	<0.002	0	0	<13.33	<0.0042

No sample submitted for Location M-1 Due to flow fault
No sample submitted for Location L due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

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NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/06/2002**
Sampling Date and Time: 3/3/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/03/02	TTW-01088	W	1128.8	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/03/02	FB030302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/03/02	TB030302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/03/02	TTW-01089	E	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/03/02	TTW-01090	S	1211.4	Air	<7.0	<0.002	1***	0	13.33	0.0042
03/03/02	TTW-01091	V	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/03/02	TTW-01092	V- Dup	1065.6	Air	<7.0	<0.003	0	0	<13.33	<0.0048
03/03/02	TTW-01093	U	1144.8	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/03/02	TTW-01094	K	1182.6	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/03/02	TTW-01095	K- Dup	1191.75	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/03/02	TTW-01096	D	1124.8	Air	<7.0	<0.002	0	1***	13.33	0.0046
03/03/02	TTW-01097	C	1074.5	Air	<7.0	<0.003	0	0	<13.33	<0.0048
03/03/02	TTW-01098	B	1074.5	Air	<7.0	<0.003	1***	0	13.33	0.0048
03/03/02	TTW-01099	A	1169	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/03/02	TTW-01100	F	1148.4	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/03/02	TTW-01101	Q	1195.2	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/03/02	TTW-01102	J	1247.4	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/03/02	TTW-01103	N	1072.8	Air	<7.0	<0.003	0	0	<11.43	<0.0041
03/03/02	TTW-01104	M1	1148.4	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/03/02	TTW-01105	L	1078.2	Air	<7.0	<0.002	1***	0	13.33	0.0048

Sampling Locations:
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
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U: Pier 6 Exit 2
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Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
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*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

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NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/01/2002**
Sampling Date and Time: 3/4/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/04/02	FB03/04/02	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/04/02	TB03/04/02	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/04/02	TTW-01124	E	1106	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/04/02	TTW-01125	S	1157.4	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/04/02	TTW-01126	U	1182.6	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	TTW-01127	V	1179.9	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	TTW-01128	K	1022.4	Air	<7.0	<0.003	0	0	<11.25	<0.0042
03/04/02	TTW-01129	D	1089.65	Air	<7.0	<0.003	0	0	<11.25	<0.0040
03/04/02	TTW-01130	D-Dup	1137.6	Air	8.92	0.003	0	0	<13.12	<0.0044
03/04/02	TTW-01131	C	1094.4	Air	<7.0	<0.003	0	0	<11.25	<0.0040
03/04/02	TTW-01132	B	1113	Air	7.64	0.003	0	0	<13.12	<0.0045
03/04/02	TTW-01133	A	1018.8	Air	<7.0	<0.003	0	0	<11.25	<0.0043
03/04/02	TTW-01134	A-Dup	1120	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/04/02	TTW-01135	F	1038.6	Air	<7.0	<0.003	0	0	<11.25	<0.0042
03/04/02	TTW-01136	Q	1368	Air	<7.0	<0.002	0	0	<13.12	<0.0037
03/04/02	TTW-01137	J	1195.2	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/04/02	TTW-01138	N	1169	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	TTW-01139	M1	950.4	Air	<7.0	<0.003	0	0	<9.84	<0.0040
03/04/02	TTW-01140	L	1094.4	Air	<7.0	<0.003	0	0	<11.25	<0.0040
03/04/02	TTW-01141	W	1125	Air	53.50	0.018	0	0	<13.12	<0.0045

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-04-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/3/02 1200 to 2400

Data Validation Date: 03/1/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/03/02	TTW-01106	L	1003	Air	<7.0	<0.003	0	0	<11.25	<0.0043
03/03/02	TTW-01107	M1	1195.25	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/03/02	TTW-01108	N	1085.4	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/03/02	TTW-01109	J	1260	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/03/02	TTW-01110	Q	1179.5	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/03/02	TTW-01111	F	1168.2	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/03/02	TTW-01112	A	1137.5	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/03/02	TTW-01113	C	1216.25	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/03/02	TTW-01114	B	1260	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/03/02	TTW-01115	D	1260	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/03/02	TTW-01116	K	1224	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/03/02	TTW-01117	U	943.2	Air	<7.0	<0.003	0	0	<11.25	<0.0046
03/03/02	TTW-01118	V	1148.4	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/03/02	TTW-01119	S	1296	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/03/02	TTW-01120	S-Dup	1184.4	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/03/02	TTW-01121	E	1159.2	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/03/02	TTW-01122	E-Dup	1256.4	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/03/02	TTW-01123	W	1296	Air	135.03	0.040	***1	***1	31.5	0.0094

Sampling Locations:
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E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-03-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/4/02 1200 to 2400

Data Validation Date: 03/7/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S-f/cc**
03/04/02	TTW-01142	E	1110.6	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/04/02	TTW-01143	K	1212.75	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/04/02	TTW-01144	S	1254.75	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/04/02	TTW-01145	U	1264.6	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/04/02	TTW-01146	V	1153.25	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/04/02	TTW-01147	D	1074.6	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/04/02	TTW-01148	C	1296	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/04/02	TTW-01149	B	1278.35	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/04/02	TTW-01150	A	1071	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/04/02	TTW-01151	F	1116	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/04/02	TTW-01152	Q	1184.9	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	TTW-01153	J	1181.25	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	TTW-01154	N	1195.2	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/04/02	TTW-01155	M1	1260	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/04/02	TTW-01156	M1-Dup	1170.75	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	TTW-01157	L	1300.55	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/04/02	TTW-01158	L-Dup	1172.5	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	TTW-01159	W	1213.2	Air	52.23	0.017	0	*****1	15.75	0.0050

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G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-04-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/07/2002**
Sampling Date and Time: **3/5/02 0001 to 1142**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/05/02	FB030502	Field Blank	0	Air	<7.0	n/a	NA$^{(2)}$	NA$^{(2)}$	NA$^{(2)}$	NA$^{(2)}$
03/05/02	TB030502	Trip Blank	0	Air	<7.0	n/a	NA$^{(2)}$	NA$^{(2)}$	NA$^{(2)}$	NA$^{(2)}$
03/05/02	TTW-01160	E	1056.6	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/05/02	TTW-01161	K	1263.6	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/05/02	TTW-01162	S	995.4	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/05/02	TTW-01163	E-Dup	961.2	Air	<7.0	<0.003	0	0	<11.25	<0.0045
03/05/02	TTW-01164	U	1144.8	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/05/02	TTW-01165	V	1031.4	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/05/02	TTW-01166	D	479.15	Air	<7.0	<0.006	0	0	<7.87	<0.0063
03/05/02	TTW-01167	C	1085.4	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/05/02	TTW-01168	B	1031.4	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/05/02	TTW-01169	A	1051.2	Air	8.92	0.003	0	0	<13.12	<0.0048
03/05/02	TTW-01170	F	1216.8	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/05/02	TTW-01171	Q	1187.7	Air	10.19	0.003	0	0	<13.12	<0.0043
03/05/02	TTW-01172	J	1077.3	Air	7.64	0.003	0	0	<13.12	<0.0047
03/05/02	TTW-01173	N	1122.95	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/05/02	TTW-01174	N-Dup	1137.6	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/05/02	TTW-01175	M1	970.2	Air	<7.0	<0.003	0	0	<11.25	<0.0045
03/05/02	TTW-01176	L	1083.25	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/05/02	TTW-01177	W	1188.25	Air	34.39	0.011	0	0	<13.12	<0.0043

Sampling Locations:
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D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
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W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA$^{(1)}$ - Not analyzed due to overloading of particulates
NA$^{(2)}$ - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-05-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/5/02 1200 to 2400

Data Validation Date: 03/8/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/05/02	TTW-01178	E	1240.75	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/05/02	TTW-01179	K	1204.2	Air	<7.0	<0.002	***1	0	13.33	0.0043
03/05/02	TTW-01180	S	1132.2	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/05/02	TTW-01181	S- Dup	1150.2	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/05/02	TTW-01182	U	1191.6	Air	<7.0	<0.002	***1	0	13.33	0.0043
03/05/02	TTW-01183	V	1122.95	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/05/02	TTW-01184	D	1146.6	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/05/02	TTW-01185	C	1254.6	Air	7.64	0.002	0	0	<16.00	<0.0049
03/05/02	TTW-01186	B	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/05/02	TTW-01187	A	1080	Air	<7.0	<0.002	***2	0	26.67	0.0095
03/05/02	TTW-01188	A-Dup	1166.4	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/05/02	TTW-01189	F	1206	Air	<7.0	<0.002	***1	***1	26.67	0.0085
03/05/02	TTW-01190	Q	1191.6	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/05/02	TTW-01191	J	1279.2	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/05/02	TTW-01192	N	1056.6	Air	<7.0	<0.003	0	0	<13.33	<0.0049
03/05/02	TTW-01193	M1	1050	Air	<7.0	<0.003	0	0	<13.33	<0.0049
03/05/02	TTW-01194	L	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/05/02	TTW-01195	W	1252.8	Air	14.65	0.005	0	0	<16.00	<0.0049

Sampling Locations:
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Key:
* Sample volumes (filers) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-05-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/08/2002**
Sampling Date and Time: **3/6/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/06/02	FB030602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/06/02	TB030602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/06/02	TTW-01196	E	1035	Air	<7.0	<0.003	0	0	<11.43	<0.0043
03/06/02	TTW-01197	S	1002.6	Air	<7.0	<0.003	0	0	<11.43	<0.0044
03/06/02	TTW-01198	U	1079.75	Air	<7.0	<0.002	0	0	<13.33	<0.0048
03/06/02	TTW-01199	V	1240.2	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/06/02	TTW-01200	K	1037.4	Air	<7.0	<0.003	0	0	<11.43	<0.0042
03/06/02	TTW-01201	K-Dup	1168.2	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/06/02	TTW-01202	D	1041.25	Air	<7.0	<0.003	0	0	<11.43	<0.0042
03/06/02	TTW-01203	C	982.8	Air	<7.0	<0.003	0	0	<11.43	<0.0045
03/06/02	TTW-01204	B	1060.2	Air	10.19	0.004	0	0	<13.33	<0.0048
03/06/02	TTW-01205	A	1045.8	Air	<7.0	<0.003	0	0	<11.43	<0.0042
03/06/02	TTW-01206	F	1159.2	Air	7.64	0.003	0	0	<13.33	<0.0044
03/06/02	TTW-01207	Q	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/06/02	TTW-01208	N	993.6	Air	<7.0	<0.003	0	0	<11.43	<0.0044
03/06/02	TTW-01209	L	1144.8	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/06/02	TTW-01210	J	1183	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/06/02	TTW-01211	J-Dup	1087.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/06/02	TTW-01212	W	1178.45	Air	10.19	0.003	0	0	<13.33	<0.0044

No Sample submitted for Location M1 due to flow fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
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M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-06-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/20/02 0739 to 2134

Data Validation Date: 02/20/2002

Sampling Date	Sample No.	Sampling Location	Volume	Sampling Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
02/20/02	LF02956	P-1	1291.30	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/20/02	LF02957	P-2	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/20/02	LF02958	P-3	1402.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/20/02	LF02959	P-4	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/20/02	LF02960	P-5	1410.00	Air	<7.0	<0.002	***1	0	15.75	0.0043
02/20/02	LF02961	P-6	1144.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/20/02	LF02962	P-7	1294.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/20/02	LF02963	P-8	1254.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/20/02	LF02964	W-11	1440.00	Air	15.29	0.004	0	0	<15.75	<0.0042
02/20/02	LF02965	W-12A	1459.50	Air	34.39	0.009	0	0	<15.75	<0.0042
02/20/02	LF02966	W-12B	1386.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/20/02	LF02967	B-13	1252.10	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/20/02	LF02968	B-14	1232.10	Air	<7.0	<0.002	0	0	<15.75	<0.0049
02/20/02	LF02969	T-15	1728.00	Air	15.29	0.003	0	0	<19.69	<0.0044
02/20/02	LF02970	T-16	1440.00	Air	22.93	0.006	0	0	<15.75	<0.0042
02/20/02	LF02971	O-17	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/20/02	LF02972	O-18	1288.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/20/02	LF02973	O-19	1276.50	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/20/02	LF02974	MPHS-20	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/20/02	LF02975	P-1D	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/20/02	LF02976	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/20/02	LF02977	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-02-20-02 rev2.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/23/02 0658 to 1946

Data Validation Date: 02/26/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/23/02	LF03022	P-1	949.65	Air	<7.0	<0.003	0	0	<11.25	<0.0046
02/23/02	LF03023	P-2	1111.50	Air	<7.0	<0.002	***1	0	39.37	0.0136
02/23/02	LF03024	P-2 Duplicate	210.00	Air	<7.0	<0.013	0	0	<7.87	<0.0144
02/23/02	LF03025	P-3	1268.95	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/23/02	LF03026	P-4	1224.30	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/23/02	LF03027	P-5	387.00	Air	<7.0	<0.007	0	0	<4.92	<0.0049
02/23/02	LF03028	P-6	1068.00	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/23/02	LF03029	P-7	608.85	Air	<7.0	<0.004	0	0	<7.87	<0.0050
02/23/02	LF03030	P-8	1158.25	Air	<7.0	<0.002	***2	0	26.25	0.0087
02/23/02	LF03031	W-11	1118.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/23/02	LF03032	W-12A	1440.00	Air	17.83	0.005	***1	0	15.75	0.0042
02/23/02	LF03033	W-12B	1012.05	Air	<7.0	<0.003	***1	0	13.12	0.0050
02/23/02	LF03034	B-13	1119.30	Air	<7.0	<0.002	0	***1	13.12	0.0045
02/23/02	LF03035	B-14	244.00	Air	<7.0	<0.011	0	0	<3.15	<0.0050
02/23/02	LF03036	T-15	1248.00	Air	17.83	0.006	0	0	<15.75	<0.0049
02/23/02	LF03037	T-16	1025.70	Air	7.64	0.003	0	0	<13.12	<0.0049
02/23/02	LF03038	O-17	1252.55	Air	<7.0	<0.002	0	0	<15.75	<0.0048
02/23/02	LF03039	O-18	1192.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
02/23/02	LF03040	O-19	1130.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/23/02	LF03041	MPHS-20	388.05	Air	<7.0	<0.007	0	0	<7.87	<0.0078
02/23/02	LF03043	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/23/02	LF03044	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-02-23-02 rev2.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 2/21/02 1200 to 2400

Data Validation Date: 02/26/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/21/02	7093-18-0147	Park Row	1288	Air	<7.0	<0.002	0	0	<16.00	<0.0048
02/21/02	7093-19-0147	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/21/02	7093-15-0145	I.S. 143 Manhattan	1364	Air	<7.0	<0.002	0	0	<16.00	<0.0045
02/21/02	7094-09-0135	P.S. 154 (Bronx)	1386	Air	<7.0	<0.002	0	0	<16.00	<0.0044
02/21/02	7096-12-0141	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/21/02	7095-98-0141	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
02/21/02	7097-18-0138	P.S. 44 (S.I)	n/a	Air	R	R	R	R	R	R

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable
R - Sample data rejected due to no sample volume

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/2/02**
Sampling Date and Time: **2/24/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/24/02	7093-18-0150	Park Row	1298	Air	<7.0	<0.002	0	0	<15.75	<0.0047
02/24/02	7093-19-0150	Chambers Street	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/24/02	7093-15-0148	I.S. 143 Manhattan	1214	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/24/02	7094-09-0138	P.S. 154 (Bronx)	1308	Air	<7.0	<0.002	0	0	<15.75	<0.0046
02/24/02	7095-98-0144	P.S. 274 (Brooklyn)	1010	Air	<7.0	<0.003	0	0	<11.25	<0.0043
02/24/02	7096-12-0144	P.S. 199 (Queens)	1382	Air	<7.0	<0.002	0	0	<15.75	<0.0044
02/24/02	7097-18-0141	P.S. 44 (S I)	1090	Air	<7.0	<0.003	0	0	<13.12	<0.0046

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/6/02**
Sampling Date and Time: **2/25/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/25/02	7093-19-0151	Chambers Street	1124	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/25/02	7093-15-0149	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/25/02	7094-09-0139	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/25/02	7096-12-0145	P.S. 199 (Queens)	1432	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/25/02	7095-98-0145	P.S. 274 (Brooklyn)	1400	Air	<7.0	<0.002	0	0	<15.75	<0.0043
02/25/02	7097-18-0142	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/6/02**
Sampling Date and Time: 2/28/02 1200 to 2400

Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S--f/cc**
02/28/02	7093-18-0154	Park Row	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
02/28/02	7093-19-0154	Chambers Street	1172	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/28/02	7093-15-0152	I.S. 143 Manhattan	1176	Air	<7.0	<0.002	0	0	<19.69	<0.0064
02/28/02	7094-09-0142	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<13.12	<0.0035
02/28/02	7096-12-0148	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<13.12	<0.0035
02/28/02	7095-98-0148	P.S. 274 (Brooklyn)	982	Air	<7.0	<0.003	0	0	<11.25	<0.0044
02/28/02	7097-18-0145	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<13.12	<0.0035

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-02-28-02 rev1.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/6/02**
Sampling Date and Time: 3/2/02 1200 to 2400

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/02/02	7093-18-0156	Park Row	1202	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/02/02	7093-19-0156	Chambers Street	1400	Air	<7.0	<0.002	0	0	<15.75	<0.0043
03/02/02	7093-15-0154	I.S. 143 Manhattan	1118	Air	NA	NA	NA	NA	NA	NA
03/02/02	7094-09-0144	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
03/02/02	7096-12-0150	P.S. 199 (Queens)	1210	Air	NA	NA	NA	NA	NA	NA
03/02/02	7095-98-0150	P.S. 274 (Brooklyn)	1280	Air	NA	NA	NA	NA	NA	NA
03/02/02	7097-18-0147	P.S. 44 (S I)	1236	Air	NA	NA	NA	NA	NA	NA

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable
NA- Not Analyzed due to wet filter

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 2/20/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
02/20/02	05973	B-13	Soil	None	35% Cellulose	25 % Quartz
					10% Fiber Glass	30% Other
02/20/02	05974	B-13	Soil	None	40 % Cellulose	25 % Quartz
					15% Fiber Glass	20% Other
02/20/02	05975	B-14	Soil	None	40% Cellulose	20 % Quartz
					10% Fiber Glass	30% Other
02/20/02	05976	B-14	Soil	None	40% Cellulose	20 % Quartz
					10% Fiber Glass	30% Other
02/20/02	05977	Stockpile - Sifter # 3	Soil	None	45% Cellulose	25 % Other
					15% Fiber Glass	
					15% Synthetic	
02/20/02	05978	LF-BLDG 7 Pile West	Soil	Trace Amosite	40% Cellulose	50% Other
					10% Fiber Glass	
					Trace Synthetic	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 2/22/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
02/22/02	05979	Sifter # 2	Soil	None	7% Cellulose	89% Other
					4% Fiber Glass	
02/22/02	05980	Stockpile Bldg # 7	Soil	None	8 % Cellulose	87% Other
					5% Fiber Glass	
02/22/02	05981	B-14	Soil	None	7% Cellulose	88% Other
					5% Fiber Glass	
02/22/02	05982	B-14	Soil	None	6% Cellulose	91% Other
					3% Fiber Glass	
02/22/02	05983	B-13	Soil	None	8% Cellulose	88 % Other
					4% Fiber Glass	
02/22/02	05984	B-13	Soil	None	7% Cellulose	89% Other
					4% Fiber Glass	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 2/26/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
02/26/02	05985	LF-Bldg 7 Pile	Soil	0.53% Chrysotile <1% Amosite	40% Cellulose 25% Fiber Glass	34.47% Other
02/26/02	05986	LF-Bldg 6 Sifting # 7	Soil	0.81% Chrysotile	40 % Cellulose 20% Fiber Glass	39.19% Other
02/26/02	05987	B-14	Soil	0.27 % Chrysotile	45% Cellulose 20% Fiber Glass	34.73% Other
02/26/02	05988	B-14	Soil	0.26% Chrysotile	40% Cellulose 25% Fiber Glass	34.74% Other
02/26/02	05989	B-13	Soil	None	40% Cellulose 25% Fiber Glass	35 % Other
02/26/02	05990	LF-Area D - Sifting # 3	Soil	None	40% Cellulose 25% Fiber Glass	35% Other

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 12, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0650	0653	0636
Stop Time	1455	1458	1442
Run Time (minutes)	485	485	486
Maximum Concentration (ug/m^3)	204.62	69.81	63.49
Average Concentration (ug/m^3)	53.13	42.17	40.70

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/12/02

File Name	NYC1266	NYC1268	NYC1267	NYC1269	NYC1271	NYC1270
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07586	A07587	A07588	A07589
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, March 14, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:30 p.m. on March 14

Air: Fixed Monitors in New York:

Asbestos - EPA analyzed 70 samples taken in and around ground zero from March 7 through March 10. All but one sample showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

One sample, taken on March 9 at Location "W" (Wash Tent Common Area) showed 144 structures per square millimeter. This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 6,868, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

This number of exceedances is lower than reported on prior daily summaries. Earlier sampling results included an additional, unnecessary adjustment for the volume of air sampled. Using a more appropriate method, those results have been recalculated and the true levels of asbestos measured are generally lower. Consequently, the standard was actually exceeded less often than previously stated.

Staten Island Landfill:

Air (Asbestos) - A total of 77 air samples collected on February 27, and March 3, 4 and 6, were analyzed for asbestos. All samples were below the school re-entry standard.

Ambient Air Samples:

Dioxin - A total of 20 samples were collected on February 21 and February 26 at various locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Metals - Ten samples were collected on January 25 at various locations in Lower Manhattan.

All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

PCBs - A total of 20 samples were collected on February 26 and February 28 at various locations in Lower Manhattan. PCBs were not detected.

PAHs - A total of 19 samples were collected on February 19 and February 28 at various locations in Lower Manhattan. PAHs were not detected.

VOCs - Sampling for volatile organic compounds (VOCs) was conducted on March 13 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on March 13 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, March 14, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 PM)

Results pending.

NYC / ER (Mar 6 PM)

Results pending.

NYC / ER (Mar 7 AM)

Results pending.

NYC / ER (Mar 7, 1200 - 2400 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations C and F-duplicate) were not collected due to equipment malfunctions.

NYC / ER (Mar 8, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 8 PM)

Results pending.

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 9, 1200 - 2400 hrs)

1 of 18 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location W (144 S/mm^2).

NYC / ER (Mar 10, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 18)

Results pending.

Fresh Kills (Feb 19)

Results pending.

Fresh Kills (Feb 25)

Results pending.

Fresh Kills (Feb 27, 0745 - 2145 hrs)

All 20 samples analyzed were below the TEM AHERA standard.
Note: Low sample volumes recorded.

Fresh Kills (Mar 3, 0713 - 2041 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 4, 0659 - 2053 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 5)

Results pending.

Fresh Kills (Mar 6, 0647 - 2157 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 13) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to equipment malfunctions.

Ambient Air Sampling Locations

NYC / ER (Feb 21) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Feb 26) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 25) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.
Note: Elevated levels of lead identified in the quality control (QC) samples (blanks) indicate that lead is not present in the sample collected at Location S at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Feb 19) - PAHs

All 9 samples analyzed did not detect any PAHs.
1 sample (Location S) was not collected due to an equipment malfunction.

NYC / ER (Feb 28) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Feb 26) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Feb 28) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Mar 13) - Particulate Monitoring (Dataram)

Particulate levels were not measured at Locations L, N, and R due to weather conditions.

NYC / ER (Mar 13) - Volatile Organics (Mobile Laboratory)

Several volatile organic compounds were detected above the detection limit (20 ppbv) in two plume samples taken at the ground surface at the South Tower location.
Aside from one volatile organic compound detected at the Washing Tent above the detection limit (20 ppbv), no other compounds were detected at the other locations that were sampled.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/7/02 1200 to 2400

Data Validation Date: 03/9/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
03/07/02	TTW-01249	E	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/07/02	TTW-01250	S	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/07/02	TTW-01251	U	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/07/02	TTW-01252	V	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/07/02	TTW-01253	K	1260	Air	7.64	0.002	0	0	<16.00	<0.0049
03/07/02	TTW-01254	D	1296	Air	7.01	0.002	0	0	<16.00	<0.0048
03/07/02	TTW-01255	C-Dup	1332	Air	8.92	0.003	0	0	<16.00	<0.0046
03/07/02	TTW-01256	B	1332	Air	10.19	0.003	0	0	<16.00	<0.0046
03/07/02	TTW-01257	Q	1404	Air	11.46	0.003	0	0	<16.00	<0.0044
03/07/02	TTW-01258	F	1332	Air	7.01	0.002	0	0	<16.00	<0.0046
03/07/02	TTW-01259	J	1175.4	Air	7.64	0.003	0	0	<13.33	<0.0044
03/07/02	TTW-01260	N	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/07/02	TTW-01261	M1	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/07/02	TTW-01262	L	1254.6	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/07/02	TTW-01264	A	1332	Air	16.56	0.005	0	0	<16.00	<0.0046
03/07/02	TTW-01263	W	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044

No samples collected at locations C and F-Dup, due to pump Fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-07-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/10/2002**
Sampling Date and Time: **3/8/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/08/02	FB030802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/08/02	TB030802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/08/02	TTW-01265	E	1103.4	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/08/02	TTW-01266	S	1080	Air	<7.0	<0.002	0	0	<13.33	<0.0048
03/08/02	TTW-01267	U	1216.8	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/08/02	TTW-01268	V	1172.5	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/08/02	TTW-01269	K	1092.6	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/08/02	TTW-01270	D	1186.2	Air	7.64	0.002	0	0	<13.33	<0.0043
03/08/02	TTW-01271	C	1072.8	Air	8.92	0.003	0	0	<13.33	<0.0048
03/08/02	TTW-01272	B	1186.5	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/08/02	TTW-01273	A	1207.8	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/08/02	TTW-01274	A-Dup	1135.9	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/08/02	TTW-01275	F	1217.3	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/08/02	TTW-01276	Q	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/08/02	TTW-01277	Q-Dup	1186.2	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/08/02	TTW-01278	J	1076.4	Air	<7.0	<0.003	0	0	<13.33	<0.0048
03/08/02	TTW-01279	N	1164.6	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/08/02	TTW-01280	M1	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/08/02	TTW-01281	L	943.25	Air	<7.0	<0.003	0	0	<11.43	<0.0047
03/08/02	TTW-01282	W	1080.4	Air	8.28	0.003	0	0	<13.33	<0.0048

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E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
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**** Extremely low sample volume collected
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NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-08-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/12/2002**
Sampling Date and Time: **3/10/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
03/10/02	FB031002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/10/02	TB031002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/10/02	TTW-01334	E	977.4	Air	<7.0	<0.003	0	0	<11.43	<0.0045
03/10/02	TTW-01335	S	1146.6	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/10/02	TTW-01336	S-Dup	1062	Air	<7.0	<0.003	0	0	<13.33	<0.0048
03/10/02	TTW-01337	U	1205.23	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/10/02	TTW-01338	V	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/10/02	TTW-01339	K	1093.75	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/10/02	TTW-01340	D	1219.75	Air	<7.0	<0.002	***1	0	13.33	0.0042
03/10/02	TTW-01341	C	1045.8	Air	<7.0	<0.003	0	0	<13.33	<0.0049
03/10/02	TTW-01342	B	1179.5	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/10/02	TTW-01343	A	1171.8	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/10/02	TTW-01344	F	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/10/02	TTW-01345	Q	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/10/02	TTW-01346	J	1172.5	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/10/02	TTW-01347	N	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/10/02	TTW-01348	M1	1090.25	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/10/02	TTW-01349	M1-Dup	1174.25	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/10/02	TTW-01350	L	1130.5	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/10/02	TTW-01351	W	1130.4	Air	8.28	0.003	0	0	<13.33	<0.0045

Sampling Locations:
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-10-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/9/02 1200 to 2400

Data Validation Date: 03/12/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/09/02	TTW-01316	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01317	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01318	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01319	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01320	K	1404	Air	<7.0	<0.002	0	***1	16	0.0044
03/09/02	TTW-01321	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01322	C	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/09/02	TTW-01323	B	1404	Air	10.19	0.003	0	0	<16.00	<0.0044
03/09/02	TTW-01324	A	1404	Air	<7.0	<0.002	***1	0	16	0.0044
03/09/02	TTW-01325	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01326	Q	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/09/02	TTW-01327	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01328	J-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01329	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01330	N-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	TTW-01331	M1	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/09/02	TTW-01332	L	1105.2	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/09/02	TTW-01333	W	1440	Air	12.74	0.003	***9	0	144	0.0385

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (filters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-09-02-pm rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 2/27/02 0745 to 2145

Data Validation Date: 03/6/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
02/27/02	LF03110	P-1	1149.20	Air	<7.0	<0.002	0	***2	26.25	0.0088
02/27/02	LF03111	P-2	204.00	Air	<7.0	<0.013	0	0	<2.62	<0.0050
02/27/02	LF03112	P-3	1115.20	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/27/02	LF03113	P-4	1126.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/27/02	LF03114	P-5	1077.45	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/27/02	LF03115	P-6	1149.20	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/27/02	LF03116	P-7	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/27/02	LF03117	P-8	1107.20	Air	<7.0	<0.002	0	0	<13.12	<0.0046
02/27/02	LF03118	W-11	1145.80	Air	<7.0	<0.002	***1	0	13.12	0.0044
02/27/02	LF03119	W-12A	1260.00	Air	8.92	0.003	***2	0	31.50	0.0096
02/27/02	LF03120	W-12B	1174.25	Air	7.64	0.003	0	0	<13.12	<0.0043
02/27/02	LF03121	B-13	1164.50	Air	<7.0	<0.002	0	0	<13.12	<0.0043
02/27/02	LF03122	B-14	1213.80	Air	<7.0	<0.002	0	0	<15.75	<0.0050
02/27/02	LF03123	T-15	1080.00	Air	<7.0	<0.003	0	***1	13.12	0.0047
02/27/02	LF03124	T-16	1080.00	Air	<7.0	<0.003	***1	0	13.12	0.0047
02/27/02	LF03125	O-17	930.00	Air	<7.0	<0.003	0	0	<11.25	<0.0047
02/27/02	LF03126	O-18	1118.40	Air	16.56	0.006	0	0	<13.12	<0.0045
02/27/02	LF03127	O-19	1001.30	Air	<7.0	<0.003	0	0	<11.25	<0.0043
02/27/02	LF03128	MPHS-20	1096.50	Air	<7.0	<0.003	0	0	<13.12	<0.0046
02/27/02	LF03129	P-6 Dup	154.70	Air	<7.0	<0.017	0	0	<7.87	<0.0196
02/27/02	LF03130	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
02/27/02	LF03131	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-2-27-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/3/02 0713 to 2041

Data Validation Date: 03/5/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/03/02	LF03196	P-1	1213.60	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/03/02	LF03197	P-2	1139.60	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/23/02	LF03198	P-3	957.60	Air	<7.0	<0.003	0	0	<11.25	<0.0045
03/03/02	LF03199	P-4	862.60	Air	<7.0	<0.003	0	0	<9.84	<0.0044
03/03/02	LF03200	P-5	1214.10	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/03/02	LF03201	P-6	1312.20	Air	<7.0	<0.002	0	0	<13.12	<0.0038
03/03/02	LF03202	P-7	1085.95	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/03/02	LF03203	P-8	1125.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/03/02	LF03204	W-12A	1106.30	Air	<7.0	<0.002	***1	***1	26.25	0.0091
03/03/02	LF03205	W-12B	1282.05	Air	30.57	0.009	0	0	<15.75	<0.0047
03/03/02	LF03206	B-13	1171.80	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/03/02	LF03207	B-14	1258.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/03/02	LF03208	T-15	1152.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/03/02	LF03209	T-16	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/03/02	LF03210	O-17	1045.80	Air	15.29	0.006	0	0	<13.12	<0.0048
03/03/02	LF03211	O-18	1250.20	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/03/02	LF03212	O-19	1240.70	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/03/02	LF03213	MPHS-20	1018.80	Air	<7.0	<0.003	0	0	<13.12	<0.0050
03/03/02	LF03214	P-7Dup	1130.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/03/02	LF03215	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/03/02	LF03216	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-03-03-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/4/02 0659 to 2053

Data Validation Date: 03/6/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/04/02	LF03217	P-1	652.80	Air	<7.0	<0.004	0	0	<7.87	<0.0046
03/04/02	LF03218	P-2	1116.80	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/04/02	LF03219	P-3	1185.85	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	LF03220	P-4	1008.10	Air	<7.0	<0.003	0	0	<19.69	<0.0075
03/04/02	LF03221	P-5	1152.60	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/04/02	LF03222	P-6	1067.60	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/04/02	LF03223	P-7	965.65	Air	<7.0	<0.003	0	0	<11.25	<0.0045
03/04/02	LF03224	P-8	1032.00	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/04/02	LF03225	W-12A	1116.00	Air	<7.0	<0.002	***1	0	13.12	0.0045
03/04/02	LF03226	W-12B	1011.50	Air	<7.0	<0.003	0	0	<13.12	<0.0050
03/04/02	LF03227	B-13	1159.40	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/04/02	LF03228	B-14	1211.75	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/04/02	LF03229	T-15	1188.00	Air	11.46	0.004	0	0	<13.12	<0.0043
03/04/02	LF03230	T-16	1188.00	Air	11.46	0.004	0	0	<13.12	<0.0043
03/04/02	LF03231	O-17	1104.00	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/04/02	LF03232	O-18	1156.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/04/02	LF03233	O-19	1018.30	Air	<7.0	<0.003	0	0	<13.12	<0.0050
03/04/02	LF03234	MPHS-20	1166.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/04/02	LF03235	P-8 Dup	1011.20	Air	<7.0	<0.003	0	0	<13.12	<0.0050
03/04/02	LF03236	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/04/02	LF03237	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite

NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-3-4-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/6/02 0647 to 2157

Data Validation Date: 03/10/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/06/02	LF03259	P-1	1056.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/06/02	LF03260	P-2	1123.70	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/06/02	LF03261	P-3	1256.40	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/06/02	LF03262	P-4	965.25	Air	<7.0	<0.003	0	0	<11.25	<0.0045
03/06/02	LF03263	P-5	1130.35	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/06/02	LF03264	P-6	1177.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/06/02	LF03265	P-7	1233.75	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/06/02	LF03266	P-8	1245.05	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/06/02	LF03267	W-12A	1240.75	Air	30.57	0.009	***1	***1	31.5	0.0098
03/06/02	LF03268	W-12B	1147.50	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/06/02	LF03269	B-13	1032.90	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/06/02	LF03270	B-14	1213.60	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/06/02	LF03271	T-15	1332.00	Air	7.64	0.002	0	0	<15.75	<0.0046
03/06/02	LF03272	T-16	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/06/02	LF03273	O-17	1200.60	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/06/02	LF03274	O-18	1167.90	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/06/02	LF03275	O-19	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/06/02	LF03276	MPHS-20	1154.30	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/06/02	LF03277	B-14 Dup	1178.45	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/06/02	LF03278	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/06/02	LF03279	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-06-02 rev1.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/19/02

Sample No.	06551		06552		06553		06555		06556	
Sampling Location	Location R		Location E		Location P		Location D		Location C	
Volume (L)	936		948		906.53		936		865.8	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.5	U	1.6	U	1.5	U	1.7
2-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5
1-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5
Biphenyl	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
2,6-Dimethylnaphthalene	U	1.3	U	1.2	U	1.3	U	1.3	U	1.4
Acenaphthylene	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
Acenaphthene	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
Dibenzofuran	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Fluorene	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Phenanthrene	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2
Anthracene	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2
Carbazole	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Fluoranthene	U	0.97	U	0.96	U	1.0	U	0.97	U	1.0
Pyrene	U	0.97	U	0.96	U	1.0	U	0.97	U	1.0
Benzo[a]anthracene	U	0.86	U	0.85	U	0.89	U	0.86	U	0.93
Chrysene	U	0.86	U	0.85	U	0.89	U	0.86	U	0.93
Benzo[b]fluoranthene	U	0.78	U	0.77	U	0.80	U	0.78	U	0.84
Benzo[k]fluoranthene	U	0.78	U	0.77	U	0.80	U	0.78	U	0.84
Benzo[e]pyrene	U	0.78	U	0.77	U	0.80	U	0.78	U	0.84
Benzo[a]pyrene	U	0.78	U	0.77	U	0.80	U	0.78	U	0.84
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.70	U	0.73	U	0.71	U	0.77
Dibenzo[a,h]anthracene	U	0.70	U	0.70	U	0.73	U	0.70	U	0.76
Benzo[g,h,i]perylene	U	0.71	U	0.70	U	0.73	U	0.71	U	0.77

COC: 02/19/02-PAHs ERT: 3/7/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-19-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/19/02								
Sample No.	06557		06558		06559		06560	
Sampling Location	Location B		Location B		Location 3A		Location A	
	800		936		912		948	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.8	U	1.5	U	1.6	U	1.5
2-Methylnaphthalene	U	1.6	U	1.4	U	1.4	U	1.4
1-Methylnaphthalene	U	1.6	U	1.4	U	1.4	U	1.4
Biphenyl	U	1.5	U	1.3	U	1.3	U	1.3
2,6-Dimethylnaphthalene	U	1.5	U	1.3	U	1.3	U	1.2
Acenaphthylene	U	1.5	U	1.3	U	1.3	U	1.3
Acenaphthene	U	1.5	U	1.3	U	1.3	U	1.3
Dibenzofuran	U	1.4	U	1.2	U	1.2	U	1.2
Fluorene	U	1.4	U	1.2	U	1.2	U	1.2
Phenanthrene	U	1.3	U	1.1	U	1.1	U	1.1
Anthracene	U	1.3	U	1.1	U	1.1	U	1.1
Carbazole	U	1.4	U	1.2	U	1.2	U	1.2
Fluoranthene	U	1.1	U	0.97	U	1.0	U	0.96
Pyrene	U	1.1	U	0.97	U	1.0	U	0.96
Benzo[a]anthracene	U	1.0	U	0.86	U	0.88	U	0.85
Chrysene	U	1.0	U	0.86	U	0.88	U	0.85
Benzo[b]fluoranthene	U	0.91	U	0.78	U	0.80	U	0.77
Benzo[k]fluoranthene	U	0.91	U	0.78	U	0.80	U	0.77
Benzo[e]pyrene	U	0.91	U	0.78	U	0.80	U	0.77
Benzo[a]pyrene	U	0.91	U	0.78	U	0.80	U	0.77
Indeno(1,2,3-c,d)pyrene	U	0.83	U	0.71	U	0.73	U	0.70
Dibenzo[a,h]anthracene	U	0.82	U	0.70	U	0.72	U	0.70
Benzo[g,h,i]perylene	U	0.83	U	0.71	U	0.73	U	0.70

COC: 02/19/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-19-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: NYC ER Site

Date Sampled 02/19/02				
Sample No.	06561		06562	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 02/19/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-19-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 02/28/02										
Sample No.	06587		06588		06589		06590		06591	
Sampling Location	Location R		Location E		Location P		Location S		Location D	
Volume (L)	960		900		904		863.08		936	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.6	U	1.6	U	1.7	U	1.5
2-Methylnaphthalene	U	1.3	U	1.4	U	1.4	U	1.5	U	1.4
1-Methylnaphthalene	U	1.3	U	1.4	U	1.4	U	1.5	U	1.4
Biphenyl	U	1.2	U	1.3	U	1.3	U	1.4	U	1.3
2,6-Dimethylnaphthalene	U	1.2	U	1.3	U	1.3	U	1.4	U	1.3
Acenaphthylene	U	1.3	U	1.3	U	1.3	U	1.4	U	1.3
Acenaphthene	U	1.2	U	1.3	U	1.3	U	1.4	U	1.3
Dibenzofuran	U	1.1	U	1.2	U	1.2	U	1.3	U	1.2
Fluorene	U	1.2	U	1.2	U	1.2	U	1.3	U	1.2
Phenanthrene	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1
Anthracene	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1
Carbazole	U	1.1	U	1.2	U	1.2	U	1.3	U	1.2
Fluoranthene	U	0.95	U	1.0	U	1.0	U	1.1	U	0.97
Pyrene	U	0.95	U	1.0	U	1.0	U	1.1	U	0.97
Benzo[a]anthracene	U	0.84	U	0.89	U	0.89	U	0.93	U	0.86
Chrysene	U	0.84	U	0.89	U	0.89	U	0.93	U	0.86
Benzo[b]fluoranthene	U	0.76	U	0.81	U	0.81	U	0.84	U	0.78
Benzo[k]fluoranthene	U	0.76	U	0.81	U	0.81	U	0.84	U	0.78
Benzo[e]pyrene	U	0.76	U	0.81	U	0.81	U	0.84	U	0.78
Benzo[a]pyrene	U	0.76	U	0.81	U	0.81	U	0.84	U	0.78
Indeno(1,2,3-c,d)pyrene	U	0.69	U	0.74	U	0.74	U	0.77	U	0.71
Dibenzo[a,h]anthracene	U	0.69	U	0.73	U	0.73	U	0.76	U	0.70
Benzo[g,h,i]perylene	U	0.69	U	0.74	U	0.74	U	0.77	U	0.71

COC: 02/28/02-PAHs ERT: 3/8/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-28-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 02/28/02										
Sample No.	06592		06593		06594		06595		06596	
Sampling Location	Location C		Location B		Location 3A		Location A		Location A	
	995.4		861.1		878.88		948		936	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.4	U	1.7	U	1.6	U	1.5	U	1.5
2-Methylnaphthalene	U	1.3	U	1.5	U	1.5	U	1.4	U	1.4
1-Methylnaphthalene	U	1.3	U	1.5	U	1.5	U	1.4	U	1.4
Biphenyl	U	1.2	U	1.4	U	1.4	U	1.3	U	1.3
2,6-Dimethylnaphthalene	U	1.2	U	1.4	U	1.3	U	1.2	U	1.3
Acenaphthylene	U	1.2	U	1.4	U	1.4	U	1.3	U	1.3
Acenaphthene	U	1.2	U	1.4	U	1.4	U	1.3	U	1.3
Dibenzofuran	U	1.1	U	1.3	U	1.2	U	1.2	U	1.2
Fluorene	U	1.1	U	1.3	U	1.3	U	1.2	U	1.2
Phenanthrene	U	1.0	U	1.2	U	1.2	U	1.1	U	1.1
Anthracene	U	1.0	U	1.2	U	1.2	U	1.1	U	1.1
Carbazole	U	1.1	U	1.3	U	1.3	U	1.2	U	1.2
Fluoranthene	U	0.91	U	1.1	U	1.0	U	0.96	U	0.97
Pyrene	U	0.91	U	1.1	U	1.0	U	0.96	U	0.97
Benzo[a]anthracene	U	0.81	U	0.93	U	0.92	U	0.85	U	0.86
Chrysene	U	0.81	U	0.93	U	0.92	U	0.85	U	0.86
Benzo[b]fluoranthene	U	0.73	U	0.85	U	0.83	U	0.77	U	0.78
Benzo[k]fluoranthene	U	0.73	U	0.85	U	0.83	U	0.77	U	0.78
Benzo[e]pyrene	U	0.73	U	0.85	U	0.83	U	0.77	U	0.78
Benzo[a]pyrene	U	0.73	U	0.85	U	0.83	U	0.77	U	0.78
Indeno(1,2,3-c,d)pyrene	U	0.67	U	0.77	U	0.76	U	0.70	U	0.71
Dibenzo[a,h]anthracene	U	0.66	U	0.77	U	0.75	U	0.70	U	0.70
Benzo[g,h,i]perylene	U	0.67	U	0.77	U	0.76	U	0.70	U	0.71

COC: 02/28/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-28-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 02/28/02				
Sample No.	06597		06598	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 02/28/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is extimated

02-28-02PAH.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/21/02

Sample No.	WG7120-1			06470			06469			06468			06467			06466			06465		
Sampling Location	Method Blank			Location A			Location 3A			B-Church & Dey St.			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.		
Volume (Liters)	0			7316			7410			7350			7305			7005			7198		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0029	U		0.0028
12378-PeCDD	U	0.0023	0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123478-HxCDD	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123678-HxCDD	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123789-HxCDD	U	0.0049	0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
1234678-HpCDD	0.0065 J		0.10	U		0.014	U		0.014	U		0.014	U	0.0007	0.014	U	0.0007	0.014	U		0.014
OCDD	U	0.0182	0.20	U	0.0022	0.027	U		0.027	U		0.027	U		0.027	U		0.029	U		0.028
2378-TCDF	U		0.020	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0029	U		0.0028
12378-PeCDF	0.0026 J		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
23478-PeCDF	U	0.0022	0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123478-HxCDF	0.0022 J		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123678-HxCDF	0.0023 J		0.10	U		0.014	0.0002 J		0.014	U		0.014	U		0.014	U		0.014	U		0.014
234678-HxCDF	U	0.0017	0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123789-HxCDF	U	0.0025	0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
1234678-HpCDF	0.0030 J		0.10	0.0002 J		0.014	0.0004 J		0.014	U		0.014	U	0.0003	0.014	0.0003 J		0.014	U		0.014
1234789-HpCDF	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
OCDF	0.0070 J		0.20	U		0.027	U		0.027	U		0.027	U		0.027	U		0.029	U		0.028
Total TCDDs	U			0.0010			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	0.0065			0.0003			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	0.0026			U			U			U			U			U			U		
Total HxCDFs	0.0046			U			0.0002			U			U			U			U		
Total HpCDFs	0.0030			0.0002			0.0004			U			U			0.0003			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0007			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0354			0.0003			0.0004			0.0004			0.0004			0.0005			0.0006		

COC# 02/21/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 3/08/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

2-21-02dioxin.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/21/02

Sample No.	06464			06463			06462			06461			06471			06472		
Sampling Location	Location S			Location P			Location E			R- TAGA			Field Blank			Lot Blank		
Volume (Liters)	7305			7632.5			7018			7305			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0028	U		0.0029	U		0.0027	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.014	U		0.014	U	0.0003	0.014	U		0.10	U		0.10
123478-HxCDD	U		0.014	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
123789-HxCDD	U		0.014	U		0.014	U		0.014	0.0004 J		0.014	U		0.10	U		0.10
1234678-HpCDD	U	0.0006	0.014	U		0.014	U		0.014	U	0.0007	0.014	U	0.0040	0.10	0.0044 J		0.10
OCDD	U		0.027	U	0.0025	0.028	U	0.0023	0.029	U		0.027	U	0.0151	0.20	0.0123		0.20
2378-TCDF	U		0.0027	U		0.0028	U		0.0029	U		0.0027	U		0.020	U		0.020
12378-PeCDF	U	0.0002	0.014	U		0.014	0.0002 J		0.014	0.0003 J		0.014	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.014	U		0.014	U	0.0002	0.014	U		0.10	U		0.10
123478-HxCDF	U		0.014	U	0.0002	0.014	U		0.014	U		0.014	U		0.10	U		0.10
123678-HxCDF	U		0.014	U	0.0003	0.014	U	0.0002	0.014	U	0.0003	0.014	U		0.10	U		0.10
234678-HxCDF	U		0.014	U		0.014	U	0.0001	0.014	U	0.0003	0.014	U		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.014	U	0.0003	0.014	U		0.014	U		0.10	U		0.10
1234678-HpCDF	U	0.0003	0.014	U		0.014	U		0.014	U	0.0002	0.014	U		0.10	U		0.10
1234789-HpCDF	U		0.014	U		0.014	U		0.014	U	0.0003	0.014	U		0.10	U		0.10
OCDF	U		0.027	U		0.028	U		0.029	U		0.027	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			0.0004			U			U		
Total HpCDDs	U			U			U			U			U			0.0044		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			0.0002			0.0003			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0008			0.0000			0.0000			0.0001			0.0000			0.0051		
TEQ (ND=1/2)	0.0005			0.0005			0.0005			0.0005			0.0491			0.0399		

COC# 02/21/02 dioxin

2-21-02dioxin.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/26/02

Sample No.	WG7130-1			06482			06481			06480			06479			06478			06477		
Sampling Location	Method Blank			Location A			Location A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.		
Volume (Liters)	0			7006			7320			7320			7290			7350			7350		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0028	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0027
12378-PeCDD	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123478-HxCDD	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123678-HxCDD	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123789-HxCDD	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
1234678-HpCDD	0.0099 J		0.10	U	0.0009	0.014	U	0.0019	0.014	0.0015 J		0.014	U	0.0011	0.014	U		0.014	U		0.014
OCDD	U	0.0434	0.20	U		0.028	U		0.027	U		0.027	U		0.027	U		0.027	U		0.027
2378-TCDF	U		0.020	U		0.0028	U		0.0027	U		0.0027	U		0.0027	U		0.0027	U		0.0027
12378-PeCDF	U	.0029	0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
23478-PeCDF	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123478-HxCDF	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123678-HxCDF	U	0.0034	0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
234678-HxCDF	U	0.0021	0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
123789-HxCDF	0.0026 J		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
1234678-HpCDF	U		0.10	U		0.014	0.0008 J		0.014	U		0.014	U		0.014	U		0.014	U		0.014
1234789-HpCDF	U		0.10	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014	U		0.014
OCDF	U		0.20	U		0.028	U		0.027	U		0.027	U		0.027	U		0.027	U		0.027
Total TCDDs	U			U			0.0033			U			U			U			U		
Total PeCDDs	U			U			0.0012			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	0.0183			U			0.0019			0.0025			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	0.0026			U			U			U			U			U			U		
Total HpCDFs	U			U			0.0008			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0004			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0400			0.0008			0.0008			0.0011			0.0009			0.0010			0.0008		

COC# 022602 dioxin

B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 3/11/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

2-26-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/26/02

Sample No.	06476			06475			06474			06473			06483			06484		
Sampling Location	Location B			Location P			Location E			R- TAGA			Field Blank			Lot Blank		
Volume (Liters)	7595			7260			7230			7200			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0026	U		0.0028	U		0.0028	U		0.0028	U		0.020	U		0.020
12378-PeCDD	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
123478-HxCDD	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
123678-HxCDD	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
123789-HxCDD	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
1234678-HpCDD	U	0.0008	0.013	U	0.0012	0.014	U	0.0011	0.014	0.0013 J		0.014	U		0.10	U		0.10
OCDD	U		0.026	U		0.028	U		0.028	U		0.028	U		0.20	U		0.20
2378-TCDF	U		0.0026	U		0.0028	U		0.0028	U		0.0028	U		0.020	U		0.020
12378-PeCDF	0.0001 J		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
23478-PeCDF	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
123478-HxCDF	U		0.013	U		0.014	U		0.014	U		0.014	U	0.0022	0.10	U		0.10
123678-HxCDF	U		0.013	U		0.014	U		0.014	U		0.014	0.0022 J		0.10	U		0.10
234678-HxCDF	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
123789-HxCDF	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
1234678-HpCDF	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
1234789-HpCDF	U		0.013	U		0.014	U		0.014	U		0.014	U		0.10	U		0.10
OCDF	U		0.026	U		0.028	U		0.028	U		0.028	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			U			0.0009			0.0020			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	0.0001			U			U			U			U			U		
Total HxCDFs	U			U			U			U			0.0002			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0002			0.0000		
TEQ (ND=1/2)	0.0006			0.0008			0.0010			0.0010			0.0401			0.0401		

COC# 022602 dioxin

2-26-02dioxin.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/28/02

Sample No.	WG-7134-1P		06485		06486		06487		06488		06489		06490	
Sampling Location	Method Blank		R		E		P		S		D		C	
Sample Volume (L)	0		6579.38		6840		6000		6356		7545		7575	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of MoCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of DiCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of TrCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of TeCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of PeCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of HxCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of HpCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of OcCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Sum of NoCBs	U	10.0	U	1.52	U	1.46	U	1.67	U	1.57	U	1.33	U	1.32
Total	0		0		0		0		0		0		0	

COC# 02/28/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/11/02

2-28-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/28/02

Sample No.	06491		06492		06493		06494		06495		06496	
Sampling Location	B		3A		A		A		Field Blank		Lot Blank	
Sample Volume (L)	7522.5		7695		6570		7021.5		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of MoCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of DiCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of TrCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of TeCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of PeCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of HxCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of HpCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of OcCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Sum of NoCBs	U	1.33	U	1.30	U	1.52	U	1.42	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 02/28/02-Dioxin

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/26/02

Sample No.	WG-7130-1P		06473		06474		06475		06476		06477		06478	
Sampling Location	Method Blank		R		E		P		S		D		C	
Sample Volume (L)	0		7200		7230		7260		7595		7350		7350	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of MoCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of DiCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of TrCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of TeCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of PeCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of HxCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of HpCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of OcCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Sum of NoCBs	U	10.0	U	1.39	U	1.38	U	1.38	U	1.32	U	1.36	U	1.36
Total	0		0		0		0		0		0		0	

COC# 02/26/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/11/02

2-26-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 02/26/02

Sample No.	06479		06480		06481		06482		06483		06484	
Sampling Location	B		3A		A		A		Field Blank		Lot Blank	
Sample Volume (L)	7290		7320		7320		7006		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of MoCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of DiCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of TrCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of TeCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of PeCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of HxCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of HpCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of OcCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Sum of NoCBs	U	1.37	U	1.37	U	1.37	U	1.43	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 02/26/02-Dioxin

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06324		06324		06324		06323		06313		06314	
Location		Lot Blank 1		Lot Blank 2		Lot Blank 3		Field Blank		Location R		Location A	
Air Volume (L)								0		4200		4150	
Date Collected		01/25/02		01/25/02		01/25/02		01/25/02		01/25/02		01/25/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.60	U	0.60	0	0.60	U	0.60	U	0.14	1.0 J	0.14
Antimony	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	U	0.018	U	0.018
Arsenic	AA-Fur	U	0.125	U	0.125	U	0.125	U	0.125	U	0.03	U	0.03
Barium	ICAP	U	0.32	U	0.32	U	0.32	U	0.32	U	0.075	U	0.076
Beryllium	ICAP	U	0.049	U	0.049	U	0.049	U	0.049	U	0.012	U	0.012
Cadmium	ICAP	U	0.016	U	0.016	U	0.016	U J	0.016	U J	0.004	U J	0.004
Calcium	ICAP	U	3.5	U	3.5	U	3.5	U	3.5	3.1 J	0.83	9.1 J	0.84
Chromium	ICAP	0.85	0.042	0.51	0.042	0.83	0.042	0.48 J	0.042	U	0.009	U	0.009
Cobalt	ICAP	U	0.034	U	0.034	U	0.034	U	0.034	0.008	0.007	U	0.008
Copper	ICAP	U	0.44	U	0.44	U	0.44	U	0.44	U	0.11	U	0.11
Iron	ICAP	U	0.90	2.1	0.90	U	0.90	U	0.90	0.91 J	0.21	2.8 J	0.21
Lead	AA-Fur	U	0.010	0.021	0.010	0.019	0.010	U	0.010	0.020	0.002	0.060	0.002
Magnesium	ICAP	U	3.3	U	3.3	U	3.3	U	3.3	U	0.79	1.8	0.79
Manganese	ICAP	U	0.078	U	0.078	U	0.078	U	0.078	0.041	0.019	0.06	0.019
Nickel	ICAP	U	0.058	U	0.058	U	0.058	0.062 J	0.058	U	0.014	0.023 J	0.014
Potassium	ICAP	U	3.7	U	3.7	U	3.7	U	3.7	U	0.87	U	0.89
Selenium	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	U	0.018	U	0.018
Silver	ICAP	U	0.025	U	0.025	U	0.025	U	0.025	U	0.006	U	0.006
Sodium	ICAP	U	3.7	U	3.7	U	3.7	U	3.7	U	0.88	U	0.89
Thallium	AA-Fur	U	0.035	U	0.035	U	0.035	U	0.035	U	0.008	U	0.008
Vanadium	ICAP	U	0.037	U	0.037	U	0.037	U	0.037	U	0.009	U	0.009
Zinc	ICAP	U	0.079	0.11	0.079	U	0.079	U	0.079	U	0.019	0.26 J	0.019

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06315		06316		06317		06318		06319		06320	
Location		Location 3A		A-BARCLAY ST. & WEST BROADWAY		LOC B CHURCH & DEY ST		C-LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.		P-ALBANY ST. & SOUTH END AVE	
Air Volume (L)		5116.5		3750		4690		4868.75		4660		4336.5	
Date Collected		01/25/02		01/25/02		01/25/02		01/25/02		01/25/02		01/25/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.43 J	0.12	1.4 J	0.16	0.38 J	0.13	0.38 J	0.12	0.42 J	0.13	0.85 J	0.14
Antimony	AA-Fur	U	0.015	0.026	0.020	U	0.016	U	0.015	U	0.016	U	0.017
Arsenic	AA-Fur	U	0.024	U	0.033	U	0.027	U	0.026	U	0.027	U	0.029
Barium	ICAP	U	0.062	U	0.084	U	0.067	U	0.065	U	0.068	U	0.073
Beryllium	ICAP	U	0.010	U	0.013	U	0.011	U	0.010	U	0.011	U	0.012
Cadmium	ICAP	U J	0.003	U J	0.004	U J	0.003	U J	0.003	U J	0.003	U J	0.004
Calcium	ICAP	5.1 J	0.68	16 J	0.93	4.0 J	0.74	3.2 J	0.72	4.5 J	0.76	6.7 J	0.81
Chromium	ICAP	U	0.008	U	0.010	U	0.008	0.040 J	0.008	U	0.009	U	0.009
Cobalt	ICAP	U	0.007	-U	0.009	U	0.007	U	0.007	0.008	0.007	U	0.008
Copper	ICAP	U	0.086	0.13	0.11	U	0.094	U	0.091	U	0.095	U	0.10
Iron	ICAP	1.5 J	0.17	5.0 J	0.24	2.0 J	0.19	2.8 J	0.18	2.3 J	0.19	2.4 J	0.20
Lead	AA-Fur	0.046	0.002	0.15	0.003	0.040	0.002	0.021	0.002	0.021	0.002	0.040	0.002
Magnesium	ICAP	0.85	0.79	3.1	0.88	U	0.71	U	0.68	0.71	0.71	2.2	0.77
Manganese	ICAP	0.029	0.015	0.087	0.021	0.03	0.017	0.045	0.016	0.039	0.017	0.039	0.018
Nickel	ICAP	0.013 J	0.011	0.027 J	0.016	U	0.012	0.018 J	0.012	0.023 J	0.012	0.016 J	0.013
Potassium	ICAP	U	0.72	U	0.99	U	0.78	U	0.75	U	0.78	U	0.85
Selenium	AA-Fur	U	0.015	U	0.02	U	0.016	U	0.015	U	0.016	U	0.017
Silver	ICAP	U	0.005	U	0.007	U	0.005	U	0.005	U	0.005	U	0.006
Sodium	ICAP	U	0.72	1.8	0.98	U	0.78	0.81	0.75	1.0	0.79	2.7	0.85
Thallium	AA-Fur	U	0.007	U	0.009	U	0.007	U	0.007	U	0.008	U	0.008
Vanadium	ICAP	U	0.007	U	0.010	U	0.008	U	0.008	U	0.008	U	0.008
Zinc	ICAP	0.23 J	0.015	0.57 J	0.021	0.20 J	0.017	0.18 J	0.016	0.14 J	0.017	0.082 J	0.018

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1 x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06321		06322	
Location		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		3645.5		3890.5	
Date Collected		01/25/02		01/25/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.17	0.20 J	0.15
Antimony	AA-Fur	U	0.021	U	0.019
Arsenic	AA-Fur	U	0.034	U	0.032
Barium	ICAP	U	0.086	U	0.081
Beryllium	ICAP	U	0.014	U	0.013
Cadmium	ICAP	U J	0.004	U J	0.004
Calcium	ICAP	1.5 J	0.97	2.8 J	0.89
Chromium	ICAP	U	0.011	U	0.010
Cobalt	ICAP	U	0.009	0.009	0.008
Copper	ICAP	U	0.12	U	0.11
Iron	ICAP	0.99 J	0.25	U	0.23
Lead	AA-Fur	0.004	0.003	0.085	0.003
Magnesium	ICAP	U	0.91	U	0.85
Manganese	ICAP	U	0.021	U	0.020
Nickel	ICAP	U	0.016	U	0.015
Potassium	ICAP	U	1.0	U	0.94
Selenium	AA-Fur	U	0.021	U	0.019
Silver	ICAP	U	0.007	U	0.006
Sodium	ICAP	U	1.0	0.99	0.94
Thallium	AA-Fur	U	0.010	U	0.009
Vanadium	ICAP	U	0.010	U	0.009
Zinc	ICAP	U	0.022	0.033 J	0.020

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/13/02

File Name	NYC1274	NYC1275	NYC1278	NYC1279	NYC1277	NYC1280
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			Plume
Sample Number			A07590	A07591	A07593	A07592
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	24	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	100
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
O-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday-Tuesday, March 15-19, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 12:00 p.m. on March 19

Lower Manhattan:

Air Sampling for Asbestos - EPA sampled for asbestos at two lower Manhattan locations on March 3 and March 4. All four samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 6,872, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

Dust Sampling for Asbestos - A total of 10 samples were collected from various locations at ground zero on March 7. Asbestos in all samples was either not detected, or was less than 1%.

Air Sampling for Particulates - EPA used portable monitors to collect samples on March 14 through March 16 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School), and on March 17 at Location "N" and Location "R". All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for Dioxin - Ten samples were collected on February 28 at various locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Air Sampling for PCBs - A total of 20 samples were collected on March 5 and March 7 at various locations in Lower Manhattan. PCBs were not detected.

Air Sampling for PAHs - A total of 20 samples were collected on March 5 and March 7 at various locations in Lower Manhattan. PAHs were not detected.

Air Sampling for VOCs - Sampling for volatile organic compounds (VOCs) was conducted from March 14 through March 18 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes "grab" samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

A sample taken from a smoke plume at the South Tower excavation area on March 17 exceeded the OSHA PEL for benzene.

All other samples taken from March 14 through March 18 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 17 air samples collected on March 5 were analyzed for asbestos. All samples were below the school re-entry standard.

Air Sampling for Metals - Five air samples were collected on March 1 and analyzed for metals. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Dust Sampling for Asbestos - A total of 8 samples were collected from the landfill sift and barge unloading areas at the Staten Island Landfill on March 5 and March 8. Asbestos in all samples was either not detected, or was less than 1%.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on March 3 and March 4 at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, March 19, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 PM)

Results pending.

NYC / ER (Mar 6 PM)

Results pending.

NYC / ER (Mar 7 AM)

Results pending.

NYC / ER (Mar 8 PM)

Results pending.

NYC / ER (Mar 9 AM)

Results pending.

Landfill Ambient Air Sampling Locations

Fresh Kills (Feb 18) - Asbestos

Results pending.

Fresh Kills (Feb 19) - Asbestos

Results pending.

Fresh Kills (Feb 25) - Asbestos

Results pending.

Fresh Kills (Mar 5, 0732 - 2040 hrs) - Asbestos

All 17 samples analyzed were below the TEM AHERA standard.
2 samples (Locations P-7 and MPHS-20) were not collected due to equipment

malfunctions.

Fresh Kills (Mar 7) - Asbestos

Results pending.

Fresh Kills (Mar 8) - Asbestos

Results pending.

Fresh Kills (Mar 9) - Asbestos

Results pending.

Fresh Kills (Mar 1) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

Fresh Kills (Mar 14 - 18) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to equipment malfunctions.

Ambient Air Sampling Locations

NYC / ER (Feb 28) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Mar 5) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Mar 7) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Mar 5) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Mar 7) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Mar 3 - 4) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Mar 14) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours, except for Location N, which operated approximately 5½ hours.
Station L had an average of 57.49 ug/m^3 with a maximum reading of 120.63 ug/m^3.
Station N had an average of 42.73 ug/m^3 with a maximum reading of 92.76 ug/m^3.
Station R had an average of 55.57 ug/m^3 with a maximum reading of 120.54 ug/m^3.

NYC / ER (Mar 15) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 125.99 ug/m^3 with a maximum reading of 170.65 ug/m^3.
Station N had an average of 121.01 ug/m^3 with a maximum reading of 191.41 ug/m^3.
Station R had an average of 112.83 ug/m^3 with a maximum reading of 410.90 ug/m^3.

NYC / ER (Mar 16) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instrument at Location L was weather-proofed and operated approximately 8 hours.
Instruments at Locations N and R operated approximately 1 hour due to weather conditions.
Station L had an average of 79.34 ug/m^3 with a maximum reading of 231.92 ug/m^3.
Station N had an average of 108.91 ug/m^3 with a maximum reading of 152.22 ug/m^3.
Station R had an average of 114.74 ug/m^3 with a maximum reading of 162.03 ug/m^3.

NYC / ER (Mar 17) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations N and R) were below the OSHA TWA.
Particulate measurements were not conducted at Station L due to an equipment malfunction.
Instruments operated approximately 8 hours.
Station N had an average of 16.21 ug/m^3 with a maximum reading of 107.86 ug/m^3.
Station R had an average of 17.79 ug/m^3 with a maximum reading of 107.48 ug/m^3.

NYC / ER (Mar 14) - Volatile Organics (Mobile Laboratory)

Several volatile organic compounds were detected above the detection limit (20 ppbv) in a sample taken at the Austin Tobin Plaza location.
Aside from one volatile organic compound detected at the Washing Tent above the detection limit (20 ppbv), no other compounds were detected at the other locations (North and South Towers) that were sampled.
Data is not attached electronically.

NYC / ER (Mar 15) - Volatile Organics (Mobile Laboratory)

Aside from one volatile organic compound detected above the detection limit (20 ppbv), at the ground surface of both the North and South Tower locations, no other compounds were detected at the other locations (Washing Tent and Austin Tobin Plaza) that were sampled.

NYC / ER (Mar 16) - Volatile Organics (Mobile Laboratory)

Aside from one volatile organic compound detected above the detection limit (20 ppbv) at the ground surface of the South Tower location, no other compounds

were detected at the other locations (Washing Tent, North Tower, and Austin Tobin Plaza) that were sampled.
Data is not attached electronically.

NYC / ER (Mar 17) - Volatile Organics (Mobile Laboratory)

Numerous volatile organic compounds were detected above the detection limit (20 ppbv) in a ground surface sample taken from a smoke plume on the debris pile at the South Tower location (Tully Ramp pile).
Benzene exceeded OSHA TWA PEL (1 ppm) at the South Tower location in a ground surface sample taken from a smoke plume on the debris pile.
No other volatile organic compounds were detected above the detection limit (20 ppbv) at the other locations (Washing Tent, North Tower, and Austin Tobin Plaza) that were sampled.

NYC / ER (Mar 18) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Bulk Sampling

NYC (Mar 7) - Asbestos

10 bulk samples collected from the North Tower location from I-beams (4), metal debris (1), dust on top of the soil (1), and dust on the rails in the PATH tunnel (4).
Asbestos was either not detected or at less than 1% chrysotile in all of the samples.

Fresh Kills (Mar 5) - Asbestos

5 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was either not detected or at less than 1% chrysotile in all of the samples.

Fresh Kills (Mar 8) - Asbestos

3 bulk samples collected from the landfill sift and barge unloading areas.
Asbestos was either not detected or at less than 1% chrysotile in all of the samples.

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/5/02 0732 to 2040

Data Validation Date: 03/12/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/05/02	LF03238	P-1	993.30	Air	<7.0	<0.003	0	0	<13.12	<0.0051
03/05/02	LF03239	P-2	1032.00	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/05/02	LF03240	P-3	1193.25	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/05/02	LF03241	P-4	1105.20	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/05/02	LF03242	P-5	1071.00	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/05/02	LF03243	P-6	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/05/02	LF03245	P-8	1116.90	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/05/02	LF03246	W-12A	1148.85	Air	38.22	0.013	0	0	<13.12	<0.0044
03/05/02	LF03247	W-12B	877.20	Air	11.46	0.005	0	*****1	11.25	0.0049
03/05/02	LF03248	B-13	1169.60	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/05/02	LF03249	B-14	1069.20	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/05/02	LF03250	T-15	1224.00	Air	11.46	0.004	0	0	<15.75	<0.0050
03/05/02	LF03251	T-16	1224.00	Air	7.64	0.002	0	0	<15.75	<0.0050
03/05/02	LF03252	O-17	1112.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/05/02	LF03253	O-18	1124.00	Air	7.64	0.003	0	0	<13.12	<0.0045
03/05/02	LF03254	O-19	1121.75	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/05/02	LF03256	B-13 Dup	1105.50	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/05/02	LF03257	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/05/02	LF03258	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample collected for Location P-7 and MPHS 20 Due to Pump Fault

Key:

* Some Sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-05-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/3/02 1200 to 2400

Data Validation Date: 3/6/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
03/03/02	7093-18-0157	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/03/02	7093-19-0157	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/03/02	7093-15-0155	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/03/02	7094-09-0145	P.S. 154 (Bronx)	1376	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/03/02	7096-12-0151	P.S. 199 (Queens)	1280	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/03/02	7095-98-0151	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/03/02	7097-18-0148	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-03-03-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/10/02**
Sampling Date and Time: **3/4/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/04/02	7093-18-0158	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/04/02	7093-19-0158	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/04/02	7093-15-0156	I.S. 143 Manhattan	1174	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/04/02	7094-09-0146	P.S. 154 (Bronx)	1214	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/04/02	7096-12-0152	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/04/02	7095-98-0152	P.S. 274 (Brooklyn)	1052	Air	<7.0	<0.003	0	0	<13.33	<0.0049
03/04/02	7097-18-0149	P.S. 44 (S I)	1326	Air	<7.0	<0.002	0	0	<16.00	<0.0046

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 3/5/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
03/05/02	05996	B-14	Soil	None	25% Cellulose	50% Other
					25% Fiber Glass	
03/05/02	05997	B-14	Soil	None	25% Cellulose	45% Other
					30% Fiber Glass	
03/05/02	05998	B-13	Soil	None	25% Cellulose	50% Other
					25% Fiber Glass	
03/05/02	05999	B-13	Soil	None	25% Cellulose	50% Other
					25% Fiber Glass	
03/05/02	06000	LF - Area D - Sifting # 3	Soil	0.25% Chrysotile	20% Cellulose	49.75% Other
					30% Fiber Glass	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 3/8/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
03/08/02	06001	LF Area D - Sifting # 2	Soil	<1%Chrysotile	10% Cellulose	85% Other
					5% Fiber Glass	
03/08/02	06002	B-14	Soil	<1%Chrysotile	12 % Cellulose	82% Other
					6% Fiber Glass	
03/08/02	06003	B-14	Soil	None	15% Cellulose	78% Other
					7% Fiber Glass	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC NYC
Sampling Date : 3/7/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
03/07/02	Bulk-00029	North Tower	Soil	None	25.0% Cellulose	75.00% Other (Non Fibrous)
03/07/02	Bulk-00030	North Tower	Soil	<1%Chrysotile	80% Min. Wool 5.0 % Cellulose	15.00% Other (Non Fibrous)
03/07/02	Bulk-00031	North Tower	Soil	<1%Chrysotile	80% Min. Wool 5.0 % Cellulose	15.00% Other (Non Fibrous)
03/07/02	Bulk-00032	North Tower	Soil	<1%Chrysotile	2.0% Min. Wool 3.0 % Cellulose	95.00% Other (Non Fibrous)
03/07/02	Bulk-00033	North Tower	Soil	None	90.0% Min. Wool 3.0 % Cellulose	7.00% Other (Non Fibrous)
03/07/02	Bulk-00034	North Tower	Soil	<1%Chrysotile	20.0% Min. Wool 1.0 % Cellulose	79.00% Other (Non Fibrous)
03/07/02	Bulk-00035	North Tower	Soil	None	25.0% Min. Wool 2.0 % Cellulose	73.00% Other (Non Fibrous)
03/07/02	Bulk-00036	North Tower	Soil	None	3.0 % Cellulose	97.00% Other (Non Fibrous)
03/07/02	Bulk-00037	North Tower	Soil	None	4.0 % Cellulose	96.00% Other (Non Fibrous)
03/07/02	Bulk-00038	North Tower	Soil	None	25.0% Min. Wool 3.0 % Cellulose	72.00% Other (Non Fibrous)

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

Bulk3-07-02 rev1.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/28/02

Sample No.	WG7134-1			06494			06493			06492			06491			06490			06489		
Sampling Location	Method Blank			Location A			Location A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.		
Volume (Liters)	0			7022			6570			7695			7523			7575			7545		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0028	U		0.0030	U		0.0026	U		0.0027	U		0.0026	U		0.0027
12378-PeCDD	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
123478-HxCDD	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
123678-HxCDD	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
123789-HxCDD	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
1234678-HpCDD	0.0078 J		0.10	U		0.014	U	0.0007	0.015	U		0.013	U		0.013	U		0.013	U		0.013
OCDD	U	0.0184	0.20	U		0.028	U	0.0006	0.030	U		0.026	U		0.027	U		0.026	U		0.027
2378-TCDF	U		0.020	U		0.0028	U		0.0030	U		0.0026	U		0.0027	U		0.0026	U		0.0027
12378-PeCDF	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
23478-PeCDF	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
123478-HxCDF	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
123678-HxCDF	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
234678-HxCDF	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
123789-HxCDF	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
1234678-HpCDF	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
1234789-HpCDF	U		0.10	U		0.014	U		0.015	U		0.013	U		0.013	U		0.013	U		0.013
OCDF	U		0.20	U		0.028	U		0.030	U		0.026	U		0.027	U		0.026	U		0.027
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	0.0078			U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0001			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0400			0.0009			0.0010			0.0007			0.0008			0.0007			0.0007		

COC# 02/28/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 3/14/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

2-28-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 2/28/02

Sample No.	06488			06487			06486			06485			06495			06496		
Sampling Location	Location S			Location P			Location E			R- TAGA			Field Blank			Lot Blank		
Volume (Liters)	6356			6000			6840			6579			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0031	U		0.0033	U		0.0029	U		0.0030	U		0.020	U		0.020
12378-PeCDD	U		0.016	U		0.017	U		0.015	U		0.015	U		0.10	U		0.10
123478-HxCDD	U		0.016	U		0.017	U		0.015	U		0.015	U		0.10	U		0.10
123678-HxCDD	U		0.016	U		0.017	U		0.015	U		0.015	U		0.10	U		0.10
123789-HxCDD	U		0.016	U		0.017	U		0.015	U		0.015	U		0.10	U		0.10
1234678-HpCDD	U		0.016	U	0.0010	0.017	U		0.015	U	0.0006	0.015	U		0.10	U	0.0048	0.10
OCDD	U		0.031	U		0.033	U		0.029	U	0.0027	0.030	U	0.0234	0.20	0.0161 J		0.20
2378-TCDF	U		0.0031	U		0.0033	U		0.0029	U		0.0030	U		0.020	U		0.020
12378-PeCDF	U		0.016	U		0.017	U		0.015	U		0.015	U	0.0022	0.10	U		0.10
23478-PeCDF	U		0.016	U		0.017	U		0.015	U		0.015	U		0.10	U		0.10
123478-HxCDF	U		0.016	U		0.017	U		0.015	U		0.015	0.0021 J		0.10	U		0.10
123678-HxCDF	U		0.016	U		0.017	U		0.015	U		0.015	U		0.10	U		0.10
234678-HxCDF	U		0.016	U		0.017	U		0.015	U		0.015	U	0.0033	0.10	U		0.10
123789-HxCDF	U		0.016	U		0.017	U		0.015	U		0.015	U	0.0025	0.10	U		0.10
1234678-HpCDF	U		0.016	U		0.017	U		0.015	U		0.015	U		0.10	U		0.10
1234789-HpCDF	U		0.016	U		0.017	U		0.015	U		0.015	U		0.10	U		0.10
OCDF	U		0.031	U		0.033	U		0.029	U		0.030	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			0.0021			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0002			0.0000		
TEQ (ND=1/2)	0.0009			0.0010			0.0010			0.0010			0.0402			0.0401		

COC# 02/28/02 dioxin

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 03/05/02										
Sample No.	06853		06854		06855		06856		06857	
Sampling Location	Location R		Location E		Location P		Location S		Location D	
Volume (L)	916.5		936		861.1		912.6		668.85	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.6	U	1.5	U	1.7	U	1.6	U	2.1
2-Methylnaphthalene	U	1.4	U	1.4	U	1.5	U	1.4	U	1.9
1-Methylnaphthalene	U	1.4	U	1.4	U	1.5	U	1.4	U	1.9
Biphenyl	U	1.3	U	1.3	U	1.4	U	1.3	U	1.7
2,6-Dimethylnaphthalene	U	1.3	U	1.3	U	1.4	U	1.3	U	1.7
Acenaphthylene	U	1.3	U	1.3	U	1.4	U	1.3	U	1.8
Acenaphthene	U	1.3	U	1.3	U	1.4	U	1.3	U	1.7
Dibenzofuran	U	1.2	U	1.2	U	1.3	U	1.2	U	1.6
Fluorene	U	1.2	U	1.2	U	1.3	U	1.2	U	1.7
Phenanthrene	U	1.1	U	1.1	U	1.2	U	1.1	U	1.5
Anthracene	U	1.1	U	1.1	U	1.2	U	1.1	U	1.5
Carbazole	U	1.2	U	1.2	U	1.3	U	1.2	U	1.6
Fluoranthene	U	0.99	U	0.97	U	1.1	U	0.99	U	1.3
Pyrene	U	0.99	U	0.97	U	1.1	U	0.99	U	1.3
Benzo[a]anthracene	U	0.88	U	0.86	U	0.93	U	0.88	U	1.2
Chrysene	U	0.88	U	0.86	U	0.93	U	0.88	U	1.2
Benzo[b]fluoranthene	U	0.79	U	0.78	U	0.85	U	0.80	U	1.1
Benzo[k]fluoranthene	U	0.79	U	0.78	U	0.85	U	0.80	U	1.1
Benzo[e]pyrene	U	0.79	U	0.78	U	0.85	U	0.80	U	1.1
Benzo[a]pyrene	U	0.79	U	0.78	U	0.85	U	0.80	U	1.1
Indeno(1,2,3-c,d)pyrene	U	0.73	U	0.71	U	0.77	U	0.73	U	0.96
Dibenzo[a,h]anthracene	U	0.72	U	0.70	U	0.77	U	0.72	U	0.96
Benzo[g,h,i]perylene	U	0.73	U	0.71	U	0.77	U	0.73	U	0.96

COC: 03/05/02-PAHs ERT: 3/13/02

U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-05-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 03/05/02

Sample No.	06858		06859		06860		06861		06862	
Sampling Location	Location C		Location B		Location 3A		Location 3A		Location A	
	758.1		813.7		793.95		824.85		803.4	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.9	U	1.8	U	1.8	U	1.7	U	1.8
2-Methylnaphthalene	U	1.7	U	1.6	U	1.6	U	1.6	U	1.6
1-Methylnaphthalene	U	1.7	U	1.6	U	1.6	U	1.6	U	1.6
Biphenyl	U	1.6	U	1.5	U	1.5	U	1.4	U	1.5
2,6-Dimethylnaphthalene	U	1.6	U	1.4	U	1.5	U	1.4	U	1.5
Acenaphthylene	U	1.6	U	1.5	U	1.5	U	1.5	U	1.5
Acenaphthene	U	1.6	U	1.5	U	1.5	U	1.4	U	1.5
Dibenzofuran	U	1.4	U	1.3	U	1.4	U	1.3	U	1.4
Fluorene	U	1.5	U	1.4	U	1.4	U	1.3	U	1.4
Phenanthrene	U	1.4	U	1.3	U	1.3	U	1.2	U	1.3
Anthracene	U	1.4	U	1.3	U	1.3	U	1.2	U	1.3
Carbazole	U	1.4	U	1.4	U	1.4	U	1.3	U	1.4
Fluoranthene	U	1.2	U	1.1	U	1.1	U	1.10	U	1.1
Pyrene	U	1.2	U	1.1	U	1.1	U	1.10	U	1.1
Benzo[a]anthracene	U	1.1	U	0.99	U	1.0	U	0.98	U	1.0
Chrysene	U	1.1	U	0.99	U	1.0	U	0.98	U	1.0
Benzo[b]fluoranthene	U	0.96	U	0.89	U	0.92	U	0.88	U	0.91
Benzo[k]fluoranthene	U	0.96	U	0.89	U	0.92	U	0.88	U	0.91
Benzo[e]pyrene	U	0.96	U	0.89	U	0.92	U	0.88	U	0.91
Benzo[a]pyrene	U	0.96	U	0.89	U	0.92	U	0.88	U	0.91
Indeno(1,2,3-c,d)pyrene	U	0.88	U	0.82	U	0.84	U	0.81	U	0.83
Dibenzo[a,h]anthracene	U	0.87	U	0.81	U	0.83	U	0.80	U	0.82
Benzo[g,h,i]perylene	U	0.88	U	0.82	U	0.84	U	0.81	U	0.83

COC: 03/05/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-05-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 03/05/02				
Sample No.	06863		06864	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/05/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-05-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 03/07/02										
Sample No.	06865		06866		06867		06868		06869	
Sampling Location	Location R		Location E		Location P		Location S		Location D	
Volume (L)	930		804		908.7		1028.81		960	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.8	U	1.6	U	1.4	U	1.5
2-Methylnaphthalene	U	1.4	U	1.6	U	1.4	U	1.3	U	1.3
1-Methylnaphthalene	U	1.4	U	1.6	U	1.4	U	1.3	U	1.3
Biphenyl	U	1.3	U	1.5	U	1.3	U	1.2	U	1.2
2,6-Dimethylnaphthalene	U	1.3	U	1.5	U	1.3	U	1.1	U	1.2
Acenaphthylene	U	1.3	U	1.5	U	1.3	U	1.2	U	1.3
Acenaphthene	U	1.3	U	1.5	U	1.3	U	1.2	U	1.2
Dibenzofuran	U	1.2	U	1.4	U	1.2	U	1.1	U	1.1
Fluorene	U	1.2	U	1.4	U	1.2	U	1.1	U	1.2
Phenanthrene	U	1.1	U	1.3	U	1.1	U	1.0	U	1.1
Anthracene	U	1.1	U	1.3	U	1.1	U	1.0	U	1.1
Carbazole	U	1.2	U	1.4	U	1.2	U	1.1	U	1.1
Fluoranthene	U	0.98	U	1.1	U	1.0	U	0.88	U	0.95
Pyrene	U	0.98	U	1.1	U	1.0	U	0.88	U	0.95
Benzo[a]anthracene	U	0.87	U	1.0	U	0.89	U	0.78	U	0.84
Chrysene	U	0.87	U	1.0	U	0.89	U	0.78	U	0.84
Benzo[b]fluoranthene	U	0.78	U	0.91	U	0.80	U	0.71	U	0.76
Benzo[k]fluoranthene	U	0.78	U	0.91	U	0.80	U	0.71	U	0.76
Benzo[e]pyrene	U	0.78	U	0.91	U	0.80	U	0.71	U	0.76
Benzo[a]pyrene	U	0.78	U	0.91	U	0.80	U	0.71	U	0.76
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.83	U	0.73	U	0.65	U	0.69
Dibenzo[a,h]anthracene	U	0.71	U	0.82	U	0.73	U	0.64	U	0.69
Benzo[g,h,i]perylene	U	0.71	U	0.83	U	0.73	U	0.65	U	0.69

COC: 03/07/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-07-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 03/07/02										
Sample No.	06870		06871		06872		06873		06874	
Sampling Location	Location C		Location B		Location 3A		Location 3A		Location A	
	806		811.73		906.53		792.85		872.51	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.8	U	1.8	U	1.6	U	1.8	U	1.6
2-Methylnaphthalene	U	1.6	U	1.6	U	1.4	U	1.6	U	1.5
1-Methylnaphthalene	U	1.6	U	1.6	U	1.4	U	1.6	U	1.5
Biphenyl	U	1.5	U	1.5	U	1.3	U	1.5	U	1.4
2,6-Dimethylnaphthalene	U	1.5	U	1.4	U	1.3	U	1.5	U	1.3
Acenaphthylene	U	1.5	U	1.5	U	1.3	U	1.5	U	1.4
Acenaphthene	U	1.5	U	1.5	U	1.3	U	1.5	U	1.4
Dibenzofuran	U	1.4	U	1.3	U	1.2	U	1.4	U	1.3
Fluorene	U	1.4	U	1.4	U	1.2	U	1.4	U	1.3
Phenanthrene	U	1.3	U	1.3	U	1.1	U	1.3	U	1.2
Anthracene	U	1.3	U	1.3	U	1.1	U	1.3	U	1.2
Carbazole	U	1.4	U	1.4	U	1.2	U	1.4	U	1.3
Fluoranthene	U	1.1	U	1.1	U	1.0	U	1.1	U	1.0
Pyrene	U	1.1	U	1.1	U	1.0	U	1.1	U	1.0
Benzo[a]anthracene	U	1.0	U	0.99	U	0.89	U	1.0	U	0.92
Chrysene	U	1.0	U	0.99	U	0.89	U	1.0	U	0.92
Benzo[b]fluoranthene	U	0.90	U	0.90	U	0.80	U	0.92	U	0.83
Benzo[k]fluoranthene	U	0.90	U	0.90	U	0.80	U	0.92	U	0.83
Benzo[e]pyrene	U	0.90	U	0.90	U	0.80	U	0.92	U	0.83
Benzo[a]pyrene	U	0.90	U	0.90	U	0.80	U	0.92	U	0.83
Indeno(1,2,3-c,d)pyrene	U	0.82	U	0.82	U	0.73	U	0.84	U	0.76
Dibenzo[a,h]anthracene	U	0.82	U	0.81	U	0.73	U	0.83	U	0.76
Benzo[g,h,i]perylene	U	0.82	U	0.82	U	0.73	U	0.84	U	0.76

COC: 03/07/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-07-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-0236: WTC ER Site

Date Sampled 03/07/02				
Sample No.	06875		06876	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/07/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-07-02PAH.xls

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0111		WTC-0112		WTC-0106	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		5990	
Date Collected		-		-		-		03/01/02		03/01/02		03/01/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.32	0.21
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.0083
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.0083
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.021
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.0083
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.021
Calcium	ICAP	3.6	2.5	3.4	2.5	3.5	2.5	U	2.5	U	2.5	1.2	0.42
Chromium	ICAP	0.89	0.13	0.76	0.13	0.63	0.13	U	0.13	U	0.13	0.023	0.021
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.042
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.042
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.53	0.1
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.013	0.0083
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.1
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.021
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.042
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	8.3
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.0083
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.021
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.1
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.0083
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.042
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.042

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0107		WTC-0108		WTC-0109		WTC-0110	
Location		P-8		O-17		O-18		O-19	
Air Volume (L)		4200		6370		5350		5100	
Date Collected		03/01/02		03/01/02		03/01/02		03/01/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.30	0.23	0.20	0.43	0.23	0.65	0.25
Antimony	AA-Fur	U	0.012	U	0.0078	U	0.0093	U	0.0098
Arsenic	AA-Fur	U	0.012	U	0.0078	U	0.0093	U	0.0098
Barium	ICAP	U	0.03	U	0.02	0.035	0.023	U	0.025
Beryllium	ICAP	U	0.012	U	0.0078	U	0.0093	U	0.0098
Cadmium	ICAP	U	0.03	U	0.02	U	0.023	U	0.025
Calcium	ICAP	1.4	0.60	0.87	0.39	1.6	0.47	3.5	0.49
Chromium	ICAP	0.044	0.03	U	0.02	U	0.023	U	0.025
Cobalt	ICAP	U	0.06	U	0.039	U	0.047	U	0.049
Copper	ICAP	U	0.06	U	0.039	U	0.047	U	0.049
Iron	ICAP	0.65	0.15	0.54	0.098	1.0	0.12	0.90	0.12
Lead	AA-Fur	0.015	0.012	0.011	0.0078	0.025	0.0093	0.022	0.0098
Magnesium	ICAP	U	3.0	U	2.0	U	2.3	U	2.5
Manganese	ICAP	U	0.03	U	0.02	0.024	0.023	0.025	0.025
Nickel	ICAP	U	0.06	U	0.039	U	0.047	U	0.049
Potassium	ICAP	U	12	U	7.8	U	9.3	U	9.8
Selenium	AA-Fur	U	0.012	U	0.0078	U	0.0093	U	0.0098
Silver	ICAP	U	0.03	U	0.02	U	0.023	U	0.025
Sodium	ICAP	U	3.0	U	2.0	U	2.3	U	2.5
Thallium	AA-Fur	U	0.012	U	0.0078	U	0.0093	U	0.0098
Vanadium	ICAP	U	0.06	U	0.039	U	0.047	U	0.049
Zinc	ICAP	U	0.06	U	0.039	0.057	0.047	0.05	0.049

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/07/02

Sample No.	WG-7146-1P		06763		06764		06765		06766		06767		06768	
Sampling Location	Method Blank		R		E		P		S		D		C	
Sample Volume (L)	0		6463.5		6989		5895		7517.5		7305		6315	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of MoCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of DiCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of TrCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of TeCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of PeCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of HxCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of HpCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of OcCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Sum of NoCBs	U	10.0	U	1.55	U	1.43	U	1.70	U	1.33	U	1.37	U	1.58
Total	0		0		0		0		0		0		0	

COC# 03/07/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/18/02

3-07-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/07/02

Sample No.	06769		06770		06771		06772		06773		06774	
Sampling Location	B		3A		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	7275		7200		7485		7515		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of MoCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of DiCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of TrCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of TeCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of PeCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of HxCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of HpCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of OcCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Sum of NoCBs	U	1.37	U	1.39	U	1.34	U	1.33	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 03/07/02-Dioxin

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/05/02

Sample No.	WG-7142-1P		06751		06752		06753		06754		06755		06756	
Sampling Location	Method Blank		R		E		P		S		D		C	
Sample Volume (L)	0		7003.5		7125		7170		6690		7096.5		4875	
Analyte	Result ng	MDL ng	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3
209-DeCB	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of MoCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of DiCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of TrCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of TeCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of PeCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of HxCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of HpCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of OcCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Sum of NoCBs	U	10.0	U	1.43	U	1.40	U	1.39	U	1.49	U	1.41	U	2.05
Total	0		0		0		0		0		0		0	

COC# 03/05/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/18/02

3-05-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/05/02

Sample No.	06757		06758		06759		06760		06761		06762	
Sampling Location	B		3A		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	6630		7620		6960		5602.5		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of MoCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of DiCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of TrCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of TeCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of PeCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of HxCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of HpCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of OcCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Sum of NoCBs	U	1.51	U	1.31	U	1.44	U	1.78	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 03/05/02-Dioxin

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 17, 2002

Location	L*	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	-	1.0	1.0
Start Time	-	0713	0655
Stop Time	-	1535	1516
Run Time (minutes)	-	502	501
Maximum Concentration (ug/m^3)	-	107.86	107.48
Average Concentration (ug/m^3)	-	16.21	17.79

* equipment malfunction

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 15, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0634	0638	0622
Stop Time	1434	1438	1422
Run Time (minutes)	480	480	480
Maximum Concentration (ug/m^3)	170.65	191.41	410.90
Average Concentration (ug/m^3)	125.99	121.01	112.83

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 16, 2002

Location	L**	N*	R*
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0638	0641	0625
Stop Time	1450	0748	0730
Run Time (minutes)	492	67	65
Maximum Concentration (ug/m^3)	231.92	152.22	162.03
Average Concentration (ug/m^3)	79.34	108.91	114.74

* abbreviated sampling period due to weather conditions
** weather-proofed

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 14, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0646	0918	0633
Stop Time	1448	1452	1433
Run Time (minutes)	482	334	480
Maximum Concentration (ug/m^3)	120.63	92.76	120.54
Average Concentration (ug/m^3)	57.49	42.73	55.57

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/18/02

File Name	NYC1317	NYC1318	NYC1319	NYC1320	NYC1322	NYC1321
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07611	A07612	A07613	A07614
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/17/02

File Name	NYC1308	NYC1309	NYC1310	NYC1311	NYC1314	NYC1312
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			Plume
Sample Number			A07607	A07608	A07609	A07610
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	**1200**
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	**740**
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	**280**
Bromomethane	RL	RL	RL	RL	RL	**69**
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	**1100**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	**330**
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	**160**
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	**1300**
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	**880**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	**740**
m&p-Xylenes	RL	RL	RL	RL	RL	**53**
O-Xylene	RL	RL	RL	RL	RL	**25**
Styrene	RL	RL	RL	RL	RL	**2200**
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/15/02

File Name	NYC1292	NYC1293	NYC1294	NYC1295	NYC1297	NYC1296
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07599	A07600	A07601	A07602
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	**43**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	**22**	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, March 21, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:00 p.m. on March 21

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 68 samples taken in and around ground zero from March 14 through March 16. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,065, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

Air Sampling for VOCs - Sampling for volatile organic compounds (VOCs) was conducted on March 19 and March 20 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on March 19 and March 20 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas showed no detectable levels of VOCs.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 75 samples were collected on March 7, 12, 13 and 14. A sample collected on March 14 at the northern perimeter of the landfill, (Location "P-5"), showed 78.74 structures per square millimeter, which exceeds the AHERA school re-entry standard. All other samples were below the school re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, March 21, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 PM)

Results pending.

NYC / ER (Mar 6 PM)

Results pending.

NYC / ER (Mar 7 AM)

Results pending.

NYC / ER (Mar 8 PM)

Results pending.

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 11 PM)

Results pending.

NYC / ER (Mar 14, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 15, 0001 - 1200 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations F and F-duplicate) were not collected due to equipment malfunctions.

NYC / ER (Mar 15, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location E) was not collected due to an equipment malfunction.

NYC / ER (Mar 16, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location U) was not collected since the pump was stolen from the monitoring location.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 7, 0714 - 2112 hrs) - Asbestos

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 8) - Asbestos

Results pending.

Fresh Kills (Mar 9) - Asbestos

Results pending.

Fresh Kills (Mar 12, 0742 - 2038 hrs) - Asbestos

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-7) was not collected due to an equipment malfunction.

Fresh Kills (Mar 13, 0737 - 2131 hrs) - Asbestos

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 14, 0717 - 2125 hrs)

1 of 19 samples was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location P-5 (78.74 S/mm^2).

Fresh Kills (Mar 15) - Asbestos

Results pending.

Ambient Air Sampling Locations

NYC / ER (Mar 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Mar 18) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted at Locations L, N, R due to weather conditions.

NYC / ER (Mar 19) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted at Locations L, N, R due to equipment malfunctions.

NYC / ER (Mar 20) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted at Locations L, N, R due to weather conditions.

NYC / ER (Mar 19) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 20) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/14/02 1200 to 2400

Data Validation Date: 03/17/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/14/02	TTW-01494	W	1440	Air	14.01	0.004	0	0	<16.00	<0.0043
03/14/02	TTW-01495	E	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/14/02	TTW-01496	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01497	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01498	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01500	K	1476	Air	8.92	0.002	0	0	<16.00	<0.0042
03/14/02	TTW-01501	D	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/14/02	TTW-01502	D-Dup	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/14/02	TTW-01503	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01504	C-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01505	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01506	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01507	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01508	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01509	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01510	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01511	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	TTW-01512	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-14-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/17/2002**
Sampling Date and Time: **3/15/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/15/02	FB031502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/15/02	TB031502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/15/02	TTW-01499	W	1161	Air	9.55	0.003	0	0	<13.33	<0.0045
03/15/02	TTW-01513	E	1096.2	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/15/02	TTW-01514	S	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	TTW-01515	U	1240.75	Air	<7.0	<0.002	0	0	<16.00	<0.0050
03/15/02	TTW-01516	V	1249.2	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	TTW-01517	K	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/15/02	TTW-01518	D	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	TTW-01519	C	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	TTW-01520	B	1200.8	Air	7.01	0.002	0	0	<16.00	<0.0051
03/15/02	TTW-01521	A	1239	Air	<7.0	<0.002	0	0	<16.00	<0.0050
03/15/02	TTW-01524	Q	1216.25	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/15/02	TTW-01525	Q-Dup	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	TTW-01526	J	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	TTW-01527	N	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/15/02	TTW-01528	M1	1258.2	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	TTW-01529	L	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048

No Samples submitted for Locations F and F-Dup due to pump faults

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-15-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/15/02 1200 to 2400

Data Validation Date: 03/19/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/15/02	TTW-01530	W	1476	Air	28.03	0.007	0	0	<16.00	<0.0042
03/15/02	TTW-01531	S	1404	Air	10.19	0.003	0	0	<16.00	<0.0044
03/15/02	TTW-01532	S-Dup	1208.4	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/15/02	TTW-01533	U	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/15/02	TTW-01534	V	1368	Air	<7.0	<0.002	***1	0	16	0.0045
03/15/02	TTW-01535	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/15/02	TTW-01536	K-Dup	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/15/02	TTW-01537	D	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/15/02	TTW-01538	C	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/15/02	TTW-01539	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/15/02	TTW-01540	A	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/15/02	TTW-01541	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/15/02	TTW-01542	Q	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/15/02	TTW-01543	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/15/02	TTW-01544	N	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/15/02	TTW-01545	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/15/02	TTW-01546	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample Submitted for Location E due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: **3/16/02 0001 to 1200**

Data Validation Date: 03/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/16/02	FB031602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/16/02	TB031602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/16/02	TTW-01547	W	1440	Air	24.20	0.006	0	0	<16.00	<0.0043
03/16/02	TTW-01548	E	1548	Air	<7.0	<0.002	0	0	<16.00	<0.0040
03/16/02	TTW-01549	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01550	V	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/16/02	TTW-01551	K	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/16/02	TTW-01552	D	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/16/02	TTW-01553	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01554	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01555	A	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01556	A-Dup	1476	Air	8.28	0.002	0	0	<16.00	<0.0042
03/16/02	TTW-01557	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01558	Q	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01559	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01560	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01561	N-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01562	M1	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/16/02	TTW-01563	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Samples submitted for Locations U, due to the pump being stolen from the location

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/7/02 0714 to 2112

Data Validation Date: 03/12/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/07/02	LF03280	P-1	1142.75	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/07/02	LF03281	P-2	1048.90	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/07/02	LF03282	P-3	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/07/02	LF03283	P-4	1234.35	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/07/02	LF03284	P-5	1091.40	Air	<7.0	<0.003	0	0	<13.12	<0.0046
03/07/02	LF03285	P-6	1247.40	Air	7.64	0.002	0	0	<15.75	<0.0049
03/07/02	LF03286	P-7	1179.90	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/07/02	LF03287	P-8	1267.20	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/07/02	LF03288	W-12A	1238.40	Air	38.22	0.012	0	0	<15.75	<0.0049
03/07/02	LF03289	W-12B	1260.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/07/02	LF03290	B-13	1304.25	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/07/02	LF03291	B-14	1288.80	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/07/02	LF03292	T-15	1260.00	Air	11.46	0.004	0	0	<15.75	<0.0048
03/07/02	LF03293	T-16	1296.00	Air	11.46	0.003	0	0	<15.75	<0.0047
03/07/02	LF03294	O-17	1179.75	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/07/02	LF03295	O-18	1150.05	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/07/02	LF03296	O-19	1243.80	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/07/02	LF03297	MPHS-20	1225.50	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/07/02	LF03298	W-12B Dup	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/07/02	LF03299	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/07/02	LF03300	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

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NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/12/02 0742 to 2038

Data Validation Date: 03/15/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/12/02	LF03385	P-1	1090.65	Air	<7.0	<0.003	***1	0	13.12	0.0046
03/12/02	LF03386	P-2	856.00	Air	<7.0	<0.003	0	0	<9.84	<0.0044
03/12/02	LF03387	P-3	1234.35	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/12/02	LF03388	P-4	1105.00	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/12/02	LF03389	P-5	1271.40	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/12/02	LF03390	P-6	1121.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/12/02	LF03393	P-8	1026.00	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/12/02	LF03394	W-12A	1230.45	Air	99.36	0.031	***3	0	47.24	0.0148
03/12/02	LF03395	W-12B	976.50	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/12/02	LF03396	B-13	1217.30	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/12/02	LF03397	B-14	1206.20	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/12/02	LF03398	T-15	1295.40	Air	15.29	0.005	0	0	<15.75	<0.0047
03/12/02	LF03399	T-16	1404.00	Air	26.75	0.007	0	0	<15.75	<0.0043
03/12/02	LF03400	O-17	1122.95	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/12/02	LF03401	O-18	1228.00	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/12/02	LF03402	O-19	1209.00	Air	NA(3)	NA(3)	NA(3)	NA(3)	NA(3)	NA(3)
03/12/02	LF03403	MPHS-20	1118.70	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/12/02	LF03404	P-4 Dup	1229.80	Air	NA(3)	NA(3)	NA(3)	NA(3)	NA(3)	NA(3)
03/12/02	LF03405	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/12/02	LF03406	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample was submitted for LF03392 Location P7 due to pump fault

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to Wet Filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/14/02 0717 to 2125

Data Validation Date: 03/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/14/02	LF03428	P-1	1197.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/14/02	LF03429	P-2	1109.60	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/14/02	LF03430	P-3	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/14/02	LF03431	P-4	1185.85	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/14/02	LF03432	P-5	1249.20	Air	64.97	0.020	***4	***1	78.74	0.0243
03/14/02	LF03433	P-6	1293.90	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/14/02	LF03434	P-7	1049.40	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/14/02	LF03435	P-8	1249.20	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/14/02	LF03436	W-12A	1051.05	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/14/02	LF03437	W-12B	1038.40	Air	<7.0	<0.003	0	***1	13.12	0.0049
03/14/02	LF03438	B-13	1236.90	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/14/02	LF03439	B-14	1009.80	Air	9.55	0.004	0	0	<11.25	<0.0043
03/14/02	LF03440	T-15	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/14/02	LF03441	T-16	1296.00	Air	61.15	0.018	***1	0	15.75	0.0047
03/14/02	LF03442	O-17	1295.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/14/02	LF03443	O-18	1073.60	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/14/02	LF03444	O-19	1155.60	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/14/02	LF03445	MPHS-20	1157.10	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/14/02	LF03446	P-6 Dup	1206.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/14/02	LF03447	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/14/02	LF03448	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-14-02 rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/13/02 0737 to 2131

Data Validation Date: 03/19/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm^2	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm^2	TEM (AHERA) S~f/cc**
03/13/02	LF03407	P-1	1008.00	Air	<7.0	<0.003	0	0	<11.25	<0.0043
03/13/02	LF03408	P-2	1042.20	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/13/02	LF03409	P-3	1209.60	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/13/02	LF03410	P-4	1153.30	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/13/02	LF03411	P-5	1137.60	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/13/02	LF03412	P-6	1153.30	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/13/02	LF03413	P-7	1166.10	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/13/02	LF03414	P-8	1005.10	Air	<7.0	<0.003	0	0	<11.25	<0.0043
03/13/02	LF03415	W-12A	1242.00	Air	57.32	0.018	***3	0	47.24	0.0146
03/13/02	LF03416	W-12B	1138.10	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/13/02	LF03417	B-13	1219.15	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/13/02	LF03418	B-14	870.00	Air	<7.0	<0.003	0	0	<11.25	<0.0050
03/13/02	LF03419	T-15	1368.00	Air	15.29	0.004	0	0	<15.75	<0.0044
03/13/02	LF03420	T-16	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
03/13/02	LF03421	O-17	952.00	Air	<7.0	<0.003	0	0	<11.25	<0.0045
03/13/02	LF03422	O-18	1164.70	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/13/02	LF03423	O-19	1145.70	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/13/02	LF03424	MPHS-20	924.00	Air	<7.0	<0.003	0	0	<11.25	<0.0047
03/13/02	LF03425	P-5 Dup	1112.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/13/02	LF03426	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/13/02	LF03427	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to Damaged Filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-13-02.xls

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/20/02

File Name	NYC1333	NYC1334	NYC1335	NYC1336	NYC1338	NYC1337
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07619	A07620	A07621	A07622
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/19/02

File Name	NYC1325	NYC1326	NYC1327	NYC1328	NYC1330	NYC1329
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07615	A07616	A07617	A07618
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, March 22, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:00 p.m. on March 22

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 17 samples taken in and around ground zero from March 11. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,082, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

Air Sampling for VOCs - Sampling for volatile organic compounds (VOCs) was conducted on March 21 in the direct area of the excavation at ground zero. No VOCs were detected. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

Silicates Sampling - 10 samples, taken on March 12 in and around ground zero, were analyzed for silicates. No silicates were detected in any of the samples.

Particulate Monitoring from Datarams - results from March 21 showed nothing of significance.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 18 samples were collected on March 15. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

Particulate Monitoring - Particulate monitoring at Fresh Kills landfill for March 19 - 22 showed nothing of significance. No monitoring was conducted March 22 due to weather conditions.

Bulk Dust Sampling – 6 dust samples taken on March 12 at Fresh Kills contained 1% or less of asbestos.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, March 22, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24 PM)

Results pending.

NYC / ER (Feb 25 PM)

Results pending.

NYC / ER (Mar 6 PM)

Results pending.

NYC / ER (Mar 7 AM)

Results pending.

NYC / ER (Mar 8 PM)

Results pending.

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 11, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location E) was not collected due to an equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 8) - Asbestos

Results pending.

Fresh Kills (Mar 9) - Asbestos

Results pending.

Fresh Kills (Mar 15, 0755 - 2148 hrs) - Asbestos

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 19) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-3, P-5, and P-6) based on daily average concentrations.

Fresh Kills (Mar 20) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Fresh Kills (Mar 21) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Mar 22) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Ambient Air Sampling Locations

NYC / ER (Mar 12) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Mar 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Mar 21) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8½ hours.
Station L had an average of 36.70 ug/m^3 with a maximum reading of 78.17 ug/m^3.
Station N had an average of 30.86 ug/m^3 with a maximum reading of 48.21 ug/m^3.
Station R had an average of 32.15 ug/m^3 with a maximum reading of 71.97 ug/m^3.

NYC / ER (Mar 21) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Bulk Sampling

Fresh Kills (Mar 12) - Asbestos

6 bulk samples collected from the landfill sift and active bank areas, and the barge unloading areas.
Asbestos was either not detected or at less than 1% chrysotile or 1% amosite in all of the samples.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/11/02 1200 to 2400

Data Validation Date: 03/15/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
03/11/02	TTW-01387	E-Dup	1424.75	Air	<7.0	<0.002	***1	0	16	0.0043
03/11/02	TTW-01388	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	TTW-01389	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	TTW-01390	U-Dup	1107.25	Air	<7.0	<0.002	***1	0	13.33	0.0046
03/11/02	TTW-01391	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	TTW-01392	K	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
03/11/02	TTW-01393	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	TTW-01394	C	1440	Air	12.74	0.003	0	0	<16.00	<0.0043
03/11/02	TTW-01395	B	1440	Air	10.83	0.003	0	0	<16.00	<0.0043
03/11/02	TTW-01396	A	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
03/11/02	TTW-01397	F	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/11/02	TTW-01398	Q	1404	Air	<7.0	<0.002	***1	0	16	0.0044
03/11/02	TTW-01399	J	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
03/11/02	TTW-01400	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/11/02	TTW-01401	M1	1440	Air	11.46	0.003	0	0	<16.00	<0.0043
03/11/02	TTW-01402	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	TTW-01403	W	1476	Air	21.66	0.006	0	0	<16.00	<0.0042

No Sample Submitted for Location E Due to pump malfunction

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-11-02-pm rev 1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/15/02 0755 to 2148

Data Validation Date: 03/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/15/02	LF03449	P-1	1022.00	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/15/02	LF03450	P-2	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/15/02	LF03451	P-3	1175.40	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/15/02	LF03452	P-4	1060.50	Air	<7.0	<0.003	0	0	<13.12	<0.0046
03/15/02	LF03453	P-5	1088.00	Air	[illegible]	<0.003	0	0	<13.12	<0.0046
03/15/02	LF03454	P-6	1074.15	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/15/02	LF03455	P-7	1162.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/15/02	LF03456	P-8	1165.50	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/15/02	LF03457	W-12A	1134.00	Air	40.76	0.014	0	0	<13.12	<0.0045
03/15/02	LF03458	W-12B	945.20	Air	<7.0	<0.003	0	0	<11.25	<0.0046
03/15/02	LF03459	B-13	1120.35	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/15/02	LF03460	B-14	1203.60	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/15/02	LF03461	T-15	1368.00	Air	19.11	0.005	0	0	<15.75	<0.0044
03/15/02	LF03462	T-16	1296.00	Air	19.11	0.006	0	0	<15.75	<0.0047
03/15/02	LF03463	O-17	1207.80	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/15/02	LF03464	O-18	1208.70	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/15/02	LF03465	O-19	1128.60	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/15/02	LF03466	MPHS-20	1150.90	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/15/02	LF03467	P-7 Dup	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/15/02	LF03468	Lot Blank	0.00	Air	NA(3)	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/15/02	LF03469	Trip Blank	0.00	Air	NA(3)	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to damaged container
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-15-02 rev1.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 03/12/01 0720 to 1400

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
3/12/01	TTWS-0118	A	1000	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0117	3A	1000	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0116	B	1000	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0115	C	1000	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0114	D	980	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0110	E	1000	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0113	P	1000	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0111	S	1000	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0112	S	1000	Air	<0.01	<0.02	<0.02
3/12/01	TTWS-0109	R	1000	Air	<0.01	<0.02	<0.02

coc# 04890

NS: Not sampled

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

ERT 3/19/02

NIOSH 7500: Silica crystalline by XRD

FL-03-12-01silica.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
March 21, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D089	1	461	07:41	10	00:01:00	1	0.0	0.1	38.4	50.9
3	-74.198685	40.570054	D075	1	177	01:29	10	00:00:30	1	0.0	0.1	40.5	768.2
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D074	1	901	07:31	10	00:00:30	1	0.0	0.1	34.3	72.3
6	-74.207406	40.563818	D088	1	507	08:27	10	00:01:00	1	0.0	0.1	26.3	48.1
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	2621	1	2630	07:18	10	00:00:10	1	0.0	0.1	25.0	128.2

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
March 19 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D089	1	487	08:07	10	00:01:00	1	0.0	0.1	38.4	50.9
3	-74.198685	40.570054	D075	1	975	08:08	10	00:00:30	1	0.0	0.1	36.8	67.7
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D074	1	977	08:08	10	00:00:30	1	0.0	0.1	43.9	66.3
6	-74.207406	40.563818	D088	1	486	08:06	10	00:01:00	1	0.0	0.1	34.4	50.0
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	2621	1	--	-----	10	00:00:30	1	0.0	0.1	----	----

NOTES:

No data was collected from DataRam Serial Number 2621 at Perimeter Location 8 malfunction of the Data Ram instrument.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 21, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	1.0	1.0	1.0
Start Time	0631	0635	0618
Stop Time	1502	1506	1449
Run Time (minutes)	511	511	511
Maximum Concentration (ug/m^3)	78.17	48.21	71.97
Average Concentration (ug/m^3)	36.70	30.86	32.15

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MOLIFIED METHOD
DRAFT GC/MS Results for 03/21/02

File Name	NYC1341	NYC1342	NYC1343	NYC1344	NYC1346	NYC1345
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07623	A07624	A07625	A07626
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 3/12/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
03/12/02	06004	B-14	Soil	0.52% Chrysotile	35% Cellulose	29.48% Other
					35% Fiber Glass	
03/12/02	06005	B-14	Soil	None	40% Cellulose	25% Other
					35% Fiber Glass	
03/12/02	06006	B-13	Soil	None	35% Cellulose	30% Other
					35% Fiber Glass	
03/12/02	06007	B-13	Soil	0.25% Amosite	30% Cellulose	34.75% Other
					35% Fiber Glass	
03/12/02	06008	LF - Area D - Sifting # 3	Soil	None	30% Cellulose	40% Other
					30% Fiber Glass	
03/12/02	06009	South - Active Bank	Soil	None	25% Cellulose	45% Other
					30% Fiber Glass	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday-Monday, March 23-25, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 10:45 a.m. on March 26

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 82 samples taken in and around ground zero on February 24 and 25, and from March 6 through March 8. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,164, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

Staten Island Landfill:

Air Sampling for Asbestos - A total of 19 samples were collected on March 9. All samples were below the AHERA standard.

Air Monitoring for Particulates - There were no significant readings from samples collected on March 24.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, March 25, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Feb 24, 1200 - 2159 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location K-duplicate) was not collected due to an equipment malfunction.

NYC / ER (Feb 25, 1200 - 2141 hrs)

All 14 samples analyzed were below the TEM AHERA standard.
2 samples (Locations B and K) were not collected due to equipment malfunctions.
2 samples (Locations V and S) were not collected due to the pumps having been tampered with.

NYC / ER (Mar 6, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 7, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 8, 1200 - 2400 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
3 samples (Locations A-duplicate, Q, and Q-duplicate) were not collected due to equipment malfunctions.

NYC / ER (Mar 9 AM)

Results pending.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 8) - Asbestos

Results pending.

Fresh Kills (Mar 9, 0715 - 2110 hrs) - Asbestos

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 23) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Fresh Kills (Mar 24) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-3, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Mar 12) - Silicates

Errata: Data previously reported on the March 22 Sampling Situation Report was incorrectly dated as March 12, 2001. The correct date is March 12, 2002. All of the data remains the same.

NYC / ER (Mar 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 02/26/02**
Sampling Date and Time: 2/24/02 1200 to 2159

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
02/24/02	TTW-00864	L	1198	Air	<7.0	<0.002	0	0	<13.33	<0.0043
02/24/02	TTW-00865	M1	1148	Air	<7.0	<0.002	0	0	<13.33	<0.0045
02/24/02	TTW-00866	N	1008.15	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/24/02	TTW-00867	J	1051.05	Air	<7.0	<0.003	***2	0	26.67	0.0098
02/24/02	TTW-00868	Q	1104	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/24/02	TTW-00869	F	1038	Air	<7.0	<0.003	0	0	<11.43	<0.0042
02/24/02	TTW-00870	A	448	Air	<7.0	<0.006	0	0	<8.00	<0.0069
02/24/02	TTW-00871	A-Dup	938.6	Air	<7.0	<0.003	0	0	<11.43	<0.0047
02/24/02	TTW-00872	B	1148	Air	9.55	0.003	0	0	<13.33	<0.0045
02/24/02	TTW-00873	C	1086	Air	<7.0	<0.002	0	0	<13.33	<0.0047
02/24/02	TTW-00874	D	996	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/24/02	TTW-00875	K	898.95	Air	<7.0	<0.003	***1	0	8	0.0034
02/24/02	TTW-00876	U	1033.2	Air	<7.0	<0.003	0	0	<11.43	<0.0043
02/24/02	TTW-00877	V	943.25	Air	7.64	0.003	0	0	<11.43	<0.0047
02/24/02	TTW-00878	S	1106	Air	<7.0	<0.002	0	0	<13.33	<0.0046
02/24/02	TTW-00879	E	1004	Air	<7.0	<0.003	0	0	<11.43	<0.0044
02/24/02	TTW-00880	W	390	Air	<7.0	<0.007	0	0	<11.43	<0.0113

No sample for Location K- Duplicate due to flow Fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 2/25/02 1200 to 2141

Data Validation Date: 03/1/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
02/25/02	TTW-00899	L	1034	Air	<7.0	<0.003	0	0	<13.12	<0.0049
02/25/02	TTW-00900	M1	1162	Air	8.92	0.003	0	0	<13.12	<0.0043
02/25/02	TTW-00901	N	1050	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/25/02	TTW-00902	J	1088.1	Air	<7.0	<0.003	0	0	<13.12	<0.0046
02/25/02	TTW-00903	Q	1126	Air	<7.0	<0.005	0	0	<13.12	<0.0045
02/25/02	TTW-00904	F	940	Air	<7.0	<0.003	0	0	<11.25	<0.0046
02/25/02	TTW-00905	A	1150	Air	<7.0	<0.002	0	0	<13.12	<0.0044
02/25/02	TTW-00906	B-Dup	1062	Air	<7.0	<0.003	0	0	<13.12	<0.0048
02/25/02	TTW-00907	C	1082.25	Air	7.64	0.003	0	0	<13.12	<0.0047
02/25/02	TTW-00908	D	986	Air	<7.0	<0.003	0	0	<11.25	<0.0044
02/25/02	TTW-00909	U	1035.5	Air	<7.0	<0.003	0	0	<13.12	<0.0049
02/25/02	TTW-00910	S-Duplicate	1074	Air	<7.0	<0.003	0	0	<13.12	<0.0047
02/25/02	TTW-00911	E	1134	Air	<7.0	<0.002	0	0	<13.12	<0.0045
02/25/02	TTW-00912	W	994.5	Air	<7.0	<0.003	0	0	<11.25	<0.0044

No sample for Location B, K due to Pump Fault
No sample for Location V and S, due to pump being tampered with

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Hellport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/9/02**
Sampling Date and Time: 3/6/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/06/02	TTW-01213	E	1263.6	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/06/02	TTW-01214	S	1054.8	Air	<7.0	<0.003	0	0	<13.33	<0.0049
03/06/02	TTW-01215	U	1227.6	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/06/02	TTW-01216	V	1134	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/06/02	TTW-01217	K	1205.75	Air	8.28	0.003	0	0	<13.33	<0.0043
03/06/02	TTW-01218	D	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/06/02	TTW-01219	D-Dup	1152	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/06/02	TTW-01220	C	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/06/02	TTW-01221	B-Dup	1171.05	Air	12.10	0.004	0	0	<13.33	<0.0044
03/06/02	TTW-01222	B	1368	Air	10.19	0.003	0	0	<16.00	<0.0045
03/06/02	TTW-01223	A	1168.2	Air	10.19	0.003	0	0	<13.33	<0.0044
03/06/02	TTW-01224	F	1153.8	Air	7.64	0.003	0	0	<13.33	<0.0044
03/06/02	TTW-01225	Q	1220.6	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/06/02	TTW-01226	J	1231.2	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/06/02	TTW-01227	N	1244.5	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/06/02	TTW-01228	M1	1227.6	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/06/02	TTW-01229	L	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/06/02	TTW-01230	W	1293.15	Air	14.01	0.004	0	0	<16.00	<0.0048

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-06-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/09/2002**
Sampling Date and Time: **3/7/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/07/02	FB030702	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
03/07/02	TB030702	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
03/07/02	TTW-01231	E	1195.1	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/07/02	TTW-01232	E-Dup	1051.75	Air	<7.0	<0.003	0	0	<13.33	<0.0049
03/07/02	TTW-01233	S	1058.4	Air	<7.0	<0.003	0	0	<13.33	<0.0049
03/07/02	TTW-01234	U	1260	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/07/02	TTW-01235	V	1263.5	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/07/02	TTW-01236	K	1296	Air	<7.0	<0.002	0	0	<13.33	<0.0040
03/07/02	TTW-01237	D	1134	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/07/02	TTW-01238	C	1100.75	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/07/02	TTW-01239	C-Dup	1035	Air	<7.0	<0.003	0	0	<11.43	<0.0043
03/07/02	TTW-01240	B	1160.25	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/07/02	TTW-01241	A	1006.2	Air	<7.0	<0.003	0	0	<11.43	<0.0044
03/07/02	TTW-01242	F	1214.1	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/07/02	TTW-01243	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/07/02	TTW-01244	J	1296	Air	<7.0	<0.002	0	0	<13.33	<0.0040
03/07/02	TTW-01245	N	1216.8	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/07/02	TTW-01246	M1	1274.4	Air	<7.0	<0.002	0	0	<20.00	<0.0060
03/07/02	TTW-01247	L	1204.2	Air	<7.0	<0.002	0	0	<20.00	<0.0064
03/07/02	TTW-01248	W	1100.75	Air	10.19	0.004	0	0	<13.33	<0.0047

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-07-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/8/02 1200 to 2400

Data Validation Date: 03/12/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
03/08/02	TTW-01283	E	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/08/02	TTW-01284	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	TTW-01285	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/08/02	TTW-01286	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	TTW-01287	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	TTW-01288	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	TTW-01289	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	TTW-01290	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/08/02	TTW-01291	A	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
03/08/02	TTW-01292	F	1356	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/08/02	TTW-01293	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	TTW-01294	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	TTW-01295	M1	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/08/02	TTW-01296	L	1256.4	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/08/02	TTW-01297	W	1440	Air	7.64	0.002	0	0	<16.00	<0.0043

No samples collected at locations A-Dup, Q, and Q-Dup due to pump Faults

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-08-02-pm.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/9/02 0715 to 2110

Data Validation Date: 03/12/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S-f/cc**
03/09/02	LF03322	P-1	1261.80	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/09/02	LF03323	P-2	1150.90	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/09/02	LF03324	P-3	1149.20	Air	<7.0	<0.002	0	***1	13.12	0.0044
03/09/02	LF03325	P-4	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/09/02	LF03326	P-5	1059.10	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/09/02	LF03327	P-6	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/09/02	LF03328	P-7	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/09/02	LF03329	P-8	1260.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/09/02	LF03330	W-12A	1107.70	Air	53.50	0.019	0	0	<13.12	<0.0046
03/09/02	LF03331	W-12B	1177.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/09/02	LF03332	B-13	1176.45	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/09/02	LF03333	B-14	1191.60	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/09/02	LF03334	T-15	1224.00	Air	11.46	0.004	0	0	<15.75	<0.0050
03/09/02	LF03335	T-16	1296.00	Air	29.30	0.009	0	0	<15.75	<0.0047
03/09/02	LF03336	O-17	1141.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/09/02	LF03337	O-18	1251.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/09/02	LF03338	O-19	1149.20	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/09/02	LF03339	MPHS-20	1261.80	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/09/02	LF03340	P-1 Dup	1053.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/09/02	LF03341	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/09/02	LF03342	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-09-02.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
March 24, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs)	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D088	1	960	08:00	10	00:01:00	1	0.0	0.1	43.27	474.49
3	-74.198685	40.570054	D089	1	960	08:00	10	00:00:30	1	0.0	0.1	24.16	214.15
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	2621	1	-	-	10	00:00:30	1	0.0	0.1	-	-
6	-74.207406	40.563818	D075	1	962	08:01	10	00:01:00	1	0.0	0.1	19.82	77.65
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D074	1	965	08:03	10	00:00:10	1	0.0	0.1	19.83	235.21

NOTES:

No data was collected from DataRam Serial Number 2621 at Perimeter Location P5 due to system failure.

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 03/12/02 0720 to 1400

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
3/12/02	TTWS-0118	A	1000	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0117	3A	1000	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0116	B	1000	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0115	C	1000	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0114	D	980	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0110	E	1000	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0113	P	1000	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0111	S	1000	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0112	S	1000	Air	<0.01	<0.02	<0.02
3/12/02	TTWS-0109	R	1000	Air	<0.01	<0.02	<0.02

coc# 04890

NS: Not sampled

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

ERT 3/19/02

NIOSH 7500: Silica crystalline by XRD

FL-03-12-02silica.xls

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, March 26, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on March 26

Lower Manhattan:

Air Sampling for Particulates - EPA collected samples from March 23 through March 25 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). Samples were also collected at Locations "N" and "R" on March 22. All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for VOCs - Sampling for volatile organic compounds (VOCs) was conducted from March 22 through March 25 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from March 22 through March 25 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 19 samples were collected on March 8. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, March 26, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 8, 0716 - 2050 hrs) - Asbestos

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 25 - 26) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Ambient Air Sampling Locations

NYC / ER (Mar 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Mar 22) - Particulate Monitoring (Dataram)

Particulate levels noted at two locations (Stations N and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Particulate measurements were not taken at Location L due to an equipment malfunction.
Station N had an average of 9.83 ug/m^3 with a maximum reading of 166.70 ug/m^3.
Station R had an average of 10.63 ug/m^3 with a maximum reading of 107.69 ug/m^3.

NYC / ER (Mar 23) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 21.09 ug/m^3 with a maximum reading of 92.73 ug/m^3.
Station N had an average of 15.27 ug/m^3 with a maximum reading of 50.15 ug/m^3.
Station R had an average of 43.43 ug/m^3 with a maximum reading of 18.96 ug/m^3.

NYC / ER (Mar 24) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 29.43 ug/m^3 with a maximum reading of 123.90 ug/m^3.
Station N had an average of 20.68 ug/m^3 with a maximum reading of 117.27 ug/m^3.
Station R had an average of 26.59 ug/m^3 with a maximum reading of 86.01 ug/m^3.

NYC / ER (Mar 25) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 14.85 ug/m^3 with a maximum reading of 38.03 ug/m^3.
Station N had an average of 12.05 ug/m^3 with a maximum reading of 28.92 ug/m^3.
Station R had an average of 13.49 ug/m^3 with a maximum reading of 39.98 ug/m^3.

NYC / ER (Mar 22) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 23) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 24) - Volatile Organics (Mobile Laboratory)

Aside from two compounds identified above the detection limit (20 ppbv) from a ground surface sample collected at the South Tower location, no other volatile organic compounds were detected above the detection limit (20 ppbv) at the other locations (Washing Tent, Austin Tobin Plaza, and North Tower) that were sampled.

NYC / ER (Mar 25) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/8/02 0716 to 2050

Data Validation Date: 03/12/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/08/02	LF03301	P-1	1103.40	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/08/02	LF03302	P-2	1072.50	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/08/02	LF03303	P-3	1177.75	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/08/02	LF03304	P-4	984.30	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/08/02	LF03305	P-5	1110.10	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/08/02	LF03306	P-6	1243.80	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/08/02	LF03307	P-7	1211.75	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/08/02	LF03308	P-8	1171.05	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/08/02	LF03309	W-12A	1296.00	Air	39.49	0.012	0	0	<15.75	<0.0047
03/08/02	LF03310	W-12B	1179.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/08/02	LF03311	B-13	1110.60	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/08/02	LF03312	B-14	1026.30	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/08/02	LF03313	T-15	1296.00	Air	7.64	0.002	0	0	<15.75	<0.0047
03/08/02	LF03314	T-16	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/08/02	LF03315	O-17	1174.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/08/02	LF03316	O-18	1127.10	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/08/02	LF03317	O-19	1055.25	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/08/02	LF03318	MPHS-20	1261.70	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/08/02	LF03319	W-12A Dup	1067.40	Air	47.13	0.017	0	0	<13.12	<0.0047
03/08/02	LF03320	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/08/02	LF03321	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

EK-03-08-02.xls

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 25, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0651	0654	0639
Stop Time	1441	1444	1429
Run Time (minutes)	470	470	470
Maximum Concentration (ug/m^3)	38.03	28.92	39.98
Average Concentration (ug/m^3)	14.85	12.05	13.49

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 23, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0642	0644	0630
Stop Time	1432	1435	1430
Run Time (minutes)	470	471	480
Maximum Concentration (ug/m^3)	92.73	50.15	43.43
Average Concentration (ug/m^3)	21.09	15.27	18.96

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 24, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0631	0634	0616
Stop Time	1402	1405	1400
Run Time (minutes)	451	451	464
Maximum Concentration (ug/m^3)	123.90	117.27	86.01
Average Concentration (ug/m^3)	29.43	20.68	26.59

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 22, 2002

Location	L*	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	-	2.0	2.0
Start Time	-	0639	0624
Stop Time	-	1435	1430
Run Time (minutes)	-	476	486
Maximum Concentration (ug/m^3)	-	166.70	107.69
Average Concentration (ug/m^3)	-	9.83	10.63

* equipment malfunction

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/25/02

File Name	NYC1373	NYC1374	NYC1375	NYC1376	NYC1378	NYC1377
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07639	A07640	A07641	A07642
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/23/02

File Name	NYC1357	NYC1358	NYC1359	NYC1360	NYC1362	NYC1361
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07631	A07632	A07633	A07634
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/24/02

File Name	NYC1365	NYC1366	NYC1367	NYC1368	NYC1370	NYC1369
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower	South Tower
Sample Number			A07635	A07636	A07637	A07638
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	38
Acetone	RL	RL	RL	RL	RL	21
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/22/02

File Name	NYC1349	NYC1350	NYC1351	NYC1352	NYC1354	NYC1353
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07627	A07628	A07629	A07630
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, March 27, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:45 p.m. on March 27

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 69 samples taken in and around ground zero from March 16 through March 18. EPA also sampled for asbestos at two additional lower Manhattan locations from March 7 through March 9, and from March 11 through March 13. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,245, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

Air Sampling for Particulates - EPA collected samples on March 26 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for VOCs - Sampling for volatile organic compounds (VOCs) was conducted on March 26 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on March 26 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas showed no detectable levels of VOCs.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 19 samples were collected on March 16. All samples were below the AHERA standard.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected from March 7 through March 9, and from March 11 through March 13, at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, March 27, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 16, 1200 - 2359 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
1 sample (Location E-duplicate) was not collected due to an equipment malfunction.
1 sample (Location U) was not collected since the pump was stolen.
Note: Low sample volume reported.

NYC / ER (Mar 17, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location U) was not collected since the pump was stolen.

NYC / ER (Mar 17, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 18, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 16, 0810 - 2149 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 17, 0708 - 2024 hrs)

Results pending.

Ambient Air Sampling Locations

NYC / ER (Mar 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Mar 7 - 9) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 21 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations)

Results pending.

NYC / ER (Mar 11 - 13) - Asbestos Monitoring (Particulate Monitoring Stations)

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 21 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 26) - Particulate Monitoring (Dataram)

Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
Instruments operated approximately 4 hours due to weather conditions.
Station L had an average of 30.16 ug/m^3 with a maximum reading of 99.52 ug/m^3.
Station N had an average of 26.79 ug/m^3 with a maximum reading of 56.93 ug/m^3.
Station R had an average of 32.32 ug/m^3 with a maximum reading of 58.46 ug/m^3.

NYC / ER (Mar 26) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/16/02 1200 to 2359

Data Validation Date: 03/19/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S–f/cc**
03/16/02	TTW-01564	E	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/16/02	TTW-01566	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01567	V	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/16/02	TTW-01568	K	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/16/02	TTW-01569	D	1440	Air	10.83	0.003	0	0	<16.00	<0.0043
03/16/02	TTW-01570	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01571	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01572	A	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/16/02	TTW-01573	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01574	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01575	J	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/16/02	TTW-01576	J-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01577	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	TTW-01578	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/16/02	TTW-01579	L	200	Air	<7.0	<0.013	0	0	<8.00	<0.0154
03/16/02	TTW-01580	W	1440	Air	19.11	0.005	0	0	<16.00	<0.0043

No Sample Submitted for Location U due to pump being stolen
No Sample Submitted for Location E -Dup due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-16-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/17/02 0001 to 1200

Data Validation Date: 03/18/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/17/02	FB031702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/17/02	TB031702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/17/02	TTW-01581	E	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/17/02	TTW-01582	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01583	V	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/17/02	TTW-01584	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01585	D	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/17/02	TTW-01586	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01587	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01588	B-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01589	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01590	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01591	F-Dup	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/17/02	TTW-01592	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01593	J	1165.5	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/17/02	TTW-01594	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01595	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01596	L	1476	Air	<7.0	<0.002	***1	0	16	0.0042
03/17/02	TTW-01597	W	1476	Air	8.92	0.002	0	0	<16.00	<0.0042

No Samples submitted for Locations U, due to the pump being stolen from the location

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-17-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/17/02 1200 to 2400

Data Validation Date: 03/20/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/17/02	TTW-01598	E	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/17/02	TTW-01599	S	1440	Air	8.28	0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01600	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/17/02	TTW-01601	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01602	V-Dup	1584	Air	<7.0	<0.002	0	0	<16.00	<0.0039
03/17/02	TTW-01603	K	1440	Air	<7.0	<0.002	***1	0	16	0.0043
03/17/02	TTW-01604	D	1440	Air	7.01	0.002	***1	0	16	0.0043
03/17/02	TTW-01605	C	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/17/02	TTW-01606	B	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01607	B-Dup	1138.1	Air	7.64	0.003	0	0	<13.33	<0.0045
03/17/02	TTW-01608	A	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01609	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01610	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01611	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01612	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/17/02	TTW-01613	L	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/17/02	TTW-01614	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	TTW-01615	W	1440	Air	29.30	0.006	0	0	<16.00	<0.0043

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G: Church and Duane St.
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-17-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/20/2002**
Sampling Date and Time: 3/18/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/18/02	FB031802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/18/02	TB031802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/18/02	TTW-01616	E	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01617	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01618	U	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/18/02	TTW-01619	V	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/18/02	TTW-01620	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01621	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01622	C	1224	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/18/02	TTW-01623	B	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01624	A	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01625	A-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01626	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01627	Q	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/18/02	TTW-01628	Q-Dup	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01629	J	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/18/02	TTW-01630	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01631	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01632	L	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01633	W	1404	Air	26.11	0.007	***1	0	16	0.0044

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 ; West St. - 50 yards south of Harrison St.at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-18-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/16/02 0810 to 2149

Data Validation Date: 03/20/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/16/02	LF03470	P-1	1094.80	Air	<7.0	<0.003	0	***1	13.12	0.0046
03/16/02	LF03471	P-2	1193.50	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/16/02	LF03472	P-3	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/16/02	LF03473	P-4	1042.80	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/16/02	LF03474	P-5	1042.80	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/16/02	LF03475	P-6	1064.25	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/16/02	LF03476	P-7	1170.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/16/02	LF03477	P-8	1105.50	Air	10.19	0.004	0	0	<13.12	<0.0046
03/16/02	LF03478	W-12A	1125.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/16/02	LF03479	W-12B	908.25	Air	<7.0	<0.003	0	0	<11.25	<0.0048
03/16/02	LF03480	B-13	1197.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/16/02	LF03481	B-14	1149.20	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/16/02	LF03482	T-15	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/16/02	LF03483	T-16	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/16/02	LF03484	O-17	1030.75	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/16/02	LF03485	O-18	1051.75	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/16/02	LF03486	O-19	1096.50	Air	<7.0	<0.003	0	0	<13.12	<0.0046
03/16/02	LF03487	MPHS-20	1127.10	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/16/02	LF03488	P-8 Dup	1130.50	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/16/02	LF03489	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/16/02	LF03490	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to damaged container
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-16-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/12/02**
Sampling Date and Time: 3/7/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/07/02	7093-18-0161	Park Row	1176	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/07/02	7093-19-0161	Chambers Street	1220	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/07/02	7093-15-0159	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/07/02	7094-09-0149	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/07/02	7096-12-0155	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/07/02	7095-98-0155	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<13.33	<0.0036
03/07/02	7097-18-0152	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysolite
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/18/02**
Sampling Date and Time: **3/8/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/08/02	7093-18-0162	Park Row	1336	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/08/02	7093-19-0162	Chambers Street	1400	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/08/02	7093-15-0160	I.S. 143 Manhattan	1216	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/08/02	7094-08-0150	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	7096-12-0156	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/08/02	7095-98-0156	P.S. 274 (Brooklyn)	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/08/02	7097-18-0153	P.S. 44 (S I)	1168	Air	<7.0	<0.002	0	0	<13.33	<0.0044

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/20/02**
Sampling Date and Time: 3/9/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
03/09/02	7093-18-0163	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	7093-19-0163	Chambers Street	1384	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/09/02	7093-15-0161	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	7094-08-0151	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	7096-12-0157	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	7095-98-0157	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/09/02	7097-18-0154	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/19/02**
Sampling Date and Time: 3/13/02 1200 to 2400

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/13/02	7093-18-0167	Park Row	1238	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/13/02	7093-19-0167	Chambers Street	1290	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/13/02	7093-15-0165	I.S. 143 Manhattan	1360	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/13/02	7094-09-0155	P.S. 154 (Bronx)	1376	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/13/02	7096-12-0161	P.S. 199 (Queens)	942	Air	<7.0	<0.003	0	0	<11.43	<0.0047
03/13/02	7095-98-0161	P.S. 274 (Brooklyn)	1414	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/13/02	7097-18-0158	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/11/02 1200 to 2400

Data Validation Date: 3/15/02

Sampling Date	Sample No	Sampling Location	Sample Volume***	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
03/11/02	7093-18-0165	Park Row	1312	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/11/02	7093-19-0165	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	7093-15-0163	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	7094-09-0153	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	7096-12-0159	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	7095-98-0159	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/11/02	7097-18-0156	P.S. 44 (S I)	1394	Air	<7.0	<0.002	0	0	<16.00	<0.0044

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-03-11-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/17/02**
Sampling Date and Time: **3/12/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/12/02	7093-18-0166	Park Row	1422	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/12/02	7093-19-0166	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/12/02	7093-15-0164	I.S. 143 Manhattan	1236	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/12/02	7094-09-0154	P.S. 154 (Bronx)	1344	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/12/02	7096-12-0160	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/12/02	7095-98-0160	P.S. 274 (Brooklyn)	1338	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/12/02	7097-18-0157	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-03-12-02 2.xls

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 26, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0650	0653	0636
Stop Time	1105	1110	1100
Run Time (minutes)	255	257	264
Maximum Concentration (ug/m^3)	99.52	56.93	58.46
Average Concentration (ug/m^3)	30.16	26.79	32.32

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/26/02

File Name	NYC1381	NYC1382	NYC1383	NYC1384	NYC1386	NYC1385
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower	South Tower
Sample Number			A07643	A07644	A07645	A07646
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, March 28, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:00 p.m. on March 28

Lower Manhattan:

Air Sampling for Asbestos - EPA sampled for asbestos at two lower Manhattan locations on March 5, 6, and 14. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,251, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

Air Sampling for PCBs - A total of 19 samples were collected on March 12 and March 14 at various locations in Lower Manhattan. PCBs were not detected.

Air Sampling for Metals - Ten samples were collected on January 29 at various locations in Lower Manhattan. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 49 samples were collected on March 18, 20, and 21. A sample taken at a Wash Tent (Location W-12A) showed 157.48 structures per square millimeter on March 21, which exceeds the AHERA school re-entry standard. All other samples were below the school re-entry standard.

Air Monitoring for Particulates - There were no significant readings from samples collected on March 27.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on March 5, 6, and 14 at In'ermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, March 28, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 17, 0708 - 2024 hrs)

Results pending.

Fresh Kills (Mar 18, 0811 - 2101 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
2 samples (Locations P-4 and B-14-duplicate) were not collected due to equipment malfunctions.

Fresh Kills (Mar 19, 0757 - 2125 hrs)

Results pending.

Fresh Kills (Mar 20, 0822 - 2118 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations P-3 and P-4) were not collected due to equipment malfunctions.
1 sample (Location P-7) was not analyzed due to a damaged/wet filter.

Fresh Kills (Mar 21, 0803 - 2153 hrs)

1 of 16 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location W-12A (157.48 S/mm^2).
1 sample (Location O-17) was not collected due to an equipment malfunction.

Fresh Kills (Mar 27) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Jan 29) - Metals

10 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Mar 12) - PCBs

All 9 samples analyzed did not detect any PCBs.
1 sample (Location B) was not submitted for analysis.

NYC / ER (Mar 14) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Mar 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 14) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:

- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 15) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/18/02 0811 to 2101

Data Validation Date: 03/23/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/18/02	LF03512	P-1	1069.30	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/18/02	LF03513	P-2	1044.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/18/02	LF03514	P-3	1022.20	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/18/02	LF03516	P-5	1197.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/18/02	LF03517	P-6	1120.35	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/18/02	LF03518	P-7	1121.75	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/18/02	LF03519	P-8	1132.25	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/18/02	LF03520	W-12A	1173.60	Air	22.93	0.008	0	***1	13.12	0.0043
03/18/02	LF03521	W-12B	1118.25	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/18/02	LF03522	B-13	1125.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/18/02	LF03523	B-14	1242.60	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/18/02	LF03524	T-15	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/18/02	LF03525	T-16	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/18/02	LF03526	O-17	1206.50	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/18/02	LF03527	O-18	1152.00	Air	<7.0	<0.002	R	R	<13.12	<0.0044
03/18/02	LF03528	O-19	1064.25	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/18/02	LF03529	MPHS-20	1152.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/18/02	LF03531	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/18/02	LF03532	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample submitted for LF03515, Location P4 and LF03530, B-14 Dup due to pump fault

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to damaged/wet filter
R- Sample rejected due to insufficient material
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-18-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/20/02 0822 to 2118

Data Validation Date: 03/24/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/20/02	LF03554	P-1	883.80	Air	<7.0	<0.003	0	0	<11.25	<0.0049
03/20/02	LF03555	P-2	1159.20	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/20/02	LF03558	P-5	1186.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/20/02	LF03559	P-6	773.50	Air	<7.0	<0.004	0	0	<9.84	<0.0049
03/20/02	LF03560	P-7	1278.00	Air	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)
03/20/02	LF03561	P-8	1149.75	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/20/02	LF03562	W-12A	1152.60	Air	26.75	0.009	***1	***1	26.25	0.0088
03/20/02	LF03563	W-12B	1133.90	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/20/02	LF03564	B-13	1081.20	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/20/02	LF03565	B-14	1107.70	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/20/02	LF03566	T-15	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/20/02	LF03567	T-16	1296.00	Air	49.68	0.015	0	0	<15.75	<0.0047
03/20/02	LF03568	O-17	1002.60	Air	<7.0	<0.003	0	0	<11.25	<0.0043
03/20/02	LF03569	O-18	889.00	Air	<7.0	<0.003	0	0	<11.25	<0.0049
03/20/02	LF03570	O-19	1094.40	Air	<7.0	<0.003	0	0	<13.12	<0.0046
03/20/02	LF03571	MPHS-20	1177.75	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/20/02	LF03572	P-4 Dup	1076.80	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/20/02	LF03573	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/20/02	LF03574	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample submitted for LF03556 and LF03557 due to pump fault

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to damaged/wet filter
R- Sample rejected due to insufficient material
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

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NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/21/02 0803 to 2153

Data Validation Date: 03/26/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/21/02	LF03575	P-1	1128.75	Air	<7.0	<0.002	***1	0	13.12	0.0045
03/21/02	LF03576	P-2	1064.00	Air	7.64	0.003	0	0	<13.12	<0.0047
03/21/02	LF03577	P-3	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/21/02	LF03578	P-5	1184.40	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/21/02	LF03579	P-6	1162.80	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/21/02	LF03580	P-7	1174.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/21/02	LF03581	P-8	1207.05	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/21/02	LF03582	W-12A	1292.00	Air	<7.0	<0.002	***6 ******1	***3	157.48	0.0469
03/21/02	LF03583	W-12B	1236.60	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/21/02	LF03584	B-13	1262.05	Air	8.92	0.003	***1	0	15.75	0.0048
03/21/02	LF03585	B-14	1329.30	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/21/02	LF03586	T-15	1195.10	Air	12.74	0.004	0	0	<13.12	<0.0042
03/21/02	LF03587	T-16	1404.00	Air	10.19	0.003	0	0	<15.75	<0.0043
03/21/02	LF03589	O-18	975.60	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/21/02	LF03590	O-19	1228.50	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/21/02	LF03591	MPHS-20	693.50	Air	<7.0	<0.004	0	0	<8.75	<0.0049
03/21/02	LF03592	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/21/02	LF03593	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample submitted for LF03588 due to pump fault

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
******Tremolite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to damaged/wet filter
R- Sample rejected due to insufficient material
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-21-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/12/02**
Sampling Date and Time: 3/5/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/05/02	7093-18-0159	Park Row	1390	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/05/02	7093-19-0159	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/05/02	7093-15-0157	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<13.33	<0.0036
03/05/02	7094-09-0147	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<13.33	<0.0036
03/05/02	7096-12-0153	P.S. 199 (Queens)	1436	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/05/02	7095-98-0153	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<13.33	<0.0036
03/05/02	7097-18-0150	P.S. 44 (S 1)	1304	Air	<7.0	<0.002	0	0	<16.00	<0.0047

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/6/02 1200 to 2300

Data Validation Date: 3/26/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/06/02	7093-18-0160	Park Row	1212	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/06/02	7093-19-0160	Chambers Street	1176	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/06/02	7093-15-0158	I.S. 143 Manhattan	1124	Air	<7.0	<0.002	0	0	<20.00	<0.0069
03/06/02	7094-09-0148	P.S. 154 (Bronx)	1280	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/06/02	7096-12-0154	P.S. 199 (Queens)	1320	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/06/02	7095-98-0154	P.S. 274 (Brooklyn)	1062	Air	<7.0	<0.003	0	0	<16.00	<0.0058
03/06/02	7097-18-0151	P.S. 44 (S I)	1116	Air	<7.0	<0.002	0	0	<13.33	<0.0046

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/14/02 1200 to 2400

Data Validation Date: 3/19/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
03/14/02	7093-18-0168	Park Row	1380	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/14/02	7093-19-0168	Chambers Street	1414	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/14/02	7093-15-0166	I.S. 143 Manhattan	1430	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	7094-09-0156	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	7096-12-0162	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	7095-98-0162	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/14/02	7097-18-0159	P.S. 44 (S I)	1284	Air	<7.0	<0.002	0	0	<16.00	<0.0048

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06374		06374		06374		06373		06363		06364	
Location		Lot Blank 1		Lot Blank 2		Lot Blank 3		Field Blank		Location R		Location A	
Air Volume (L)								0		3823.25		4840	
Date Collected		01/29/02		01/29/02		01/29/02		01/29/02		01/29/02		01/29/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.60	U	0.60	0	0.60	U	0.60	1.0 J	0.15	4.0 J	0.12
Antimony	ICAP	U	0.078	U	0.078	U	0.078	U	0.078	U	0.02	U	0.016
Arsenic	ICAP	U	0.085	U	0.085	U	0.085	U	0.085	U	0.022	U	0.017
Barium	ICAP	U	0.32	U	0.32	U	0.32	U	0.32	U	0.075	0.11	0.065
Beryllium	ICAP	U	0.049	U	0.049	U	0.049	U	0.049	U	0.012	U	0.010
Cadmium	ICAP	U	0.016	U	0.016	U	0.016	U	0.016	U	0.004	0.016	0.003
Calcium	ICAP	3.6	3.5	U	3.5	U	3.5	U	3.5	4.4	0.92	29	0.72
Chromium	ICAP	0.83	0.042	0.69	0.042	0.80	0.042	U	0.042	0.19	0.011	0.18	0.009
Cobalt	ICAP	U	0.034	U	0.034	U	0.034	U	0.034	U	0.009	U	0.007
Copper	ICAP	U	0.44	U	0.44	U	0.44	U	0.44	U	0.12	0.20	0.091
Iron	ICAP	5.9	0.91	U	0.91	U	0.91	U	0.91	U	0.24	11	0.19
Lead	AA-Fur	U	0.010	U	0.010	U	0.010	U	0.010	0.035	0.003	0.26	0.002
Magnesium	ICAP	U	3.3	U	3.3	U	3.3	U	3.3	U	0.87	5.5	0.68
Manganese	ICAP	U	0.078	U	0.078	U	0.078	U	0.078	0.035	0.02	0.22	0.016
Nickel	ICAP	U	0.058	U	0.058	U	0.058	U	0.058	0.024	0.015	0.034	0.012
Potassium	ICAP	U	3.7	U	3.7	U	3.7	U	3.7	U	0.96	1.3	0.76
Selenium	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	U	0.02	U	0.015
Silver	ICAP	U	0.025	U	0.025	U	0.025	U	0.025	U	0.007	U	0.005
Sodium	ICAP	U	3.7	U	3.7	U	3.7	3.9	3.7	U	0.96	U	0.76
Thallium	ICAP	U	0.035	U	0.035	U	0.035	U	0.035	U	0.017	U	0.013
Vanadium	ICAP	U	0.037	U	0.037	U	0.037	U	0.037	0.024	0.01	0.03	0.008
Zinc	ICAP	U	0.079	U	0.079	U	0.079	U	0.079	U	0.021	U	0.016

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06365		06366		06367		06368		06369		06370	
Location		Location 3A		LOC B CHURCH & DEY ST		C -LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.		S-RECTOR PLACE & SOUTH END AVE		P-ALBANY ST. & SOUTH END AVE	
Air Volume (L)		3888		5000		3720		4150		4070		4240	
Date Collected		01/29/02		01/29/02		01/29/02		01/29/02		01/29/02		01/29/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.3 J	0.039	1.2 J	0.12	1.3	0.16	1.10	0.10	0.79 J	0.15	1.5	0.14
Antimony	ICAP	U	0.020	U	0.016	U	0.021	U	0.019	U	0.019	U	0.018
Arsenic	ICAP	U	0.022	U	0.017	U	0.023	U	0.020	U	0.021	U	0.020
Barium	ICAP	U	0.081	0.071	0.06	U	0.085	U	0.076	U	0.078	0.080	0.074
Beryllium	ICAP	U	0.013	U	0.01	U	0.013	U	0.012	U	0.012	U	0.011
Cadmium	ICAP	U	0.004	0.005 J	0.003	U	0.004	U	0.004	U	0.004	U	0.004
Calcium	ICAP	12	0.90	9 J	0.7	8.7	0.94	6.8	0.80	4.0	0.86	8.5	0.82
Chromium	ICAP	0.22	0.011	0.19	0.008	0.20	0.011	0.190	0.010	0.18	0.010	0.22	0.010
Cobalt	ICAP	U	0.009	U	0.007	U	0.009	U	0.008	U	0.008	U	0.008
Copper	ICAP	U	0..11	U	0.088	U	0.12	U	0.11	U	0.11	U	0.10
Iron	ICAP	4.9	0.23	4.7	0.18	4.2	0.24	2.7	0.22	2.9	0.22	4.4	0.21
Lead	AA-Fur	0.067	0.003	0.067	0.002	0.062	0.003	0.057	0.002	0.049	0.002	0.057	0.002
Magnesium	ICAP	2.1	0.85	1.8	0.7	1.9	0.89	1.4	0.80	1.1	0.81	2.6	0.78
Manganese	ICAP	0.089	0.020	0.069	0.016	0.066	0.021	U	0.048	0.040	0.019	0.069	0.018
Nickel	ICAP	0.028	0.015	0.021	0.012	0.021	0.016	0.024	0.010	0.017	0.014	0.021	0.014
Potassium	ICAP	U	0.94	U	0.73	U	0.99	U	0.89	U	0.90	U	0.87
Selenium	ICAP	U	0.022	U	0.015	U	0.02	U	0.018	U	0.018	U	0.018
Silver	ICAP	0.008	0.006	U	0.005	U	0.007	U	0.006	U	0.007	U	0.006
Sodium	ICAP	U	0.9	1.8	0.7	U	0.99	U	0.89	U	0.90	U	0.87
Thallium	ICAP	U	0.017	U	0.013	U	0.017	U	0.016	U	0.016	U	0.015
Vanadium	ICAP	0.019	0.009	0.016	0.007	0.017	0.010	0.025	0.010	0.018	0.009	0.025	0.009
Zinc	ICAP	U	0.020	U	0.016	U	0.021	U	0.020	U	0.019	U	0.019

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06371		06372	
Location		E-LIBERTY ST. & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		4465.5		4990	
Date Collected		01/29/02		01/29/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.91	0.13	0.76	0.12
Antimony	ICAP	U	0.018	U	0.016
Arsenic	ICAP	U	0.019	U	0.017
Barium	ICAP	U	0.071	U	0.063
Beryllium	ICAP	U	0.011	U	0.010
Cadmium	ICAP	U	0.004	U	0.003
Calcium	ICAP	5.5	0.78	4.8	0.70
Chromium	ICAP	0.18	0.009	0.14	0.008
Cobalt	ICAP	U	0.008	U	0.007
Copper	ICAP	U	0.099	U	0.089
Iron	ICAP	2.4	0.20	2.0	0.18
Lead	AA-Fur	0.045	0.002	0.048	0.002
Magnesium	ICAP	1.6	0.74	1.4	0.66
Manganese	ICAP	0.042	0.017	0.037	0.016
Nickel	ICAP	0.021	0.013	0.068	0.012
Potassium	ICAP	U	0.82	U	0.74
Selenium	AA-Fur	0.018 J	0.017	U	0.015
Silver	ICAP	U	0.006	U	0.005
Sodium	ICAP	U	0.82	U	0.74
Thallium	ICAP	U	0.015	U	0.013
Vanadium	ICAP	0.018	0.008	0.015	0.007
Zinc	ICAP	U	0.018	U	0.016

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/14/02

Sample No.	WG-7160-1P		06787		06788		06789		06790		06791		06792	
Sampling Location	Method Blank		R		E		P		S		D		D	
Sample Volume (L)	0		6780		7410		7455		7500		7163		7065	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of MoCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of DiCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of TrCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of TeCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of PeCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of HxCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of HpCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of OcCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Sum of NoCBs	U	10.0	U	1.47	U	1.35	U	1.34	U	1.33	U	1.40	U	1.42
Total	0		0		0		0		0		0		0	

COC# 03/14/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/25/02

3-14-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/14/02

Sample No.	06793		06794		06795		06796		06797		06798	
Sampling Location	C		B		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	7620		7620		7005		5775		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of MoCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of DiCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of TrCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of TeCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of PeCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of HxCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of HpCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of OcCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Sum of NoCBs	U	1.31	U	1.31	U	1.43	U	1.73	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 03/14/02-Dioxin

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/12/02

Sample No.	WG-7157-1P		06775		06776		06777		06778		06779		06780	
Sampling Location	Method Blank		R		E		P		S		D		D	
Sample Volume (L)	0		7500		6675		6244.88		7537.25		7119.5		6660	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DcCB	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of MoCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of DiCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of TrCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of TeCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of PeCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of HxCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of HpCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of OcCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Sum of NoCBs	U	10.0	U	1.33	U	1.50	U	1.60	U	1.33	U	1.40	U	1.50
Total	0		0		0		0		0		0		0	

COC# 03/12/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit
NA: denotes not analyzed

ERT: 3/25/02

3-12-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/12/02

Sample No.	06781		06782 [1]		06783		06784		06785		06786	
Sampling Location	C		B		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	6670		7830		7755		7571.38		0		0	
Analyte	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng/m^3	MDL ng/m^3	Result ng	MDL ng	Result ng	MDL ng
209-DeCB	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of MoCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of DiCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of TrCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of TeCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of PeCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of HxCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of HpCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of OcCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Sum of NoCBs	U	1.50	NA	NA	U	1.29	U	1.32	U	10.0	U	10.0
Total	0		NA		0		0		0		0	

COC# 03/12/02-Dioxin

[1] Lab received no PUF in the sample jar.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
March 27, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D089	1	1053	08:47	10	00:00:30	1	0.0	0.1	8.7	66.8
3	-74.198685	40.570054	D075	1	994	08:17	10	00:00:30	1	0.0	0.1	7.3	21.7
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D074	1	1033	08:37	10	00:00:30	1	0.0	0.1	10.9	246.6
6	-74.207406	40.563818	D088	1	985	08:13	10	00:00:30	1	0.0	0.1	7.6	22.4
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	2621	1	2953	08:13	10	00:00:10	1	0.0	0.1	8.1	109.4

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday-Monday, March 29-April 1, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on April 1

Lower Manhattan:

Air Sampling for Asbestos - EPA sampled for asbestos at two Lower Manhattan locations on March 15. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,253, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

Dust Sampling for Asbestos - A total of 8 samples were collected from beams, metal debris and pipe insulation at both the North and South Tower excavation areas, and from an ongoing asbestos abatement area within ground zero on March 26. Two of the samples showed asbestos levels at greater than 1%.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 68 samples were collected on March 17, 19, 22 and 23. Samples taken on March 23 at a Wash Tent (Location W-12A) and at the eastern perimeter of the landfill (Location P-2), showed 125.98 and 170.6 structures per square millimeter, respectively, both of which exceed the AHERA school re-entry standard. All other samples were below the school re-entry standard.

Dust Sampling for Asbestos - A total of 6 samples were collected from the landfill sift and barge unloading areas on March 19. Asbestos in all samples was either not detected, or was less than 1%.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on March 15 at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, April 1, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 17, 0708 - 2024 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Locations O-18) was not analyzed due to a wet/damaged filter.

Fresh Kills (Mar 19, 0757 - 2125 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-6) was not collected due to an equipment malfunction.
1 sample (Location P-8) was not analyzed due to overloading of particulates.

Fresh Kills (Mar 22, 0715 - 2054 hrs)

All 15 samples analyzed were below the TEM AHERA standard.
2 samples (Locations P-4 and P-6) were not collected due to equipment malfunctions.
1 sample (Location O-17) was not collected.

Fresh Kills (Mar 23, 0705 - 2045 hrs)

2 of 18 samples analyzed were above the TEM AHERA standard.
Exceedances of the TEM AHERA standard occurred at Location P-2 (170.6 S/mm^2) and Location W-12A (125.98 S/mm^2).

Ambient Air Sampling Locations

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 15) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:

- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

Bulk Sampling

Fresh Kills (Mar 19) - Asbestos

6 bulk samples collected from the landfill sift and active bank areas, and the barge unloading areas.
Asbestos was either not detected or at less than 1% amosite in all of the samples.

NYC / ER (Mar 26) - Asbestos

8 bulk samples collected from both tower locations from beams (3), metal debris (2), pipe insulation (1), and from an ongoing asbestos abatement area within Ground Zero (2).
Asbestos was detected in 2 of the 8 samples (as described below) at greater than 1% chrysotile or 1% amosite.
1 sample within the asbestos abatement area identified amosite at 66.70%.
1 sample outside the asbestos abatement area identified amosite at 1.70% and chrysotile at less than 1%.
The abatement area consists of a bunch of transite piping identified southwest of the North Tower.

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/17/02 0708 to 2024

Data Validation Date: 03/20/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/17/02	LF03491	P-1	1132.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/17/02	LF03492	P-2	941.85	Air	<7.0	<0.003	0	0	<11.25	<0.0046
03/17/02	LF03493	P-3	1197.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/17/02	LF03494	P-4	1060.20	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/17/02	LF03495	P-5	1151.40	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/17/02	LF03496	P-6	1115.30	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/17/02	LF03497	P-7	1200.60	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/17/02	LF03498	P-8	1103.70	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/17/02	LF03499	W-12A	1343.30	Air	59.87	0.017	0	0	<15.75	<0.0045
03/17/02	LF03500	W-12B	1031.55	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/17/02	LF03501	B-13	1051.20	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/17/02	LF03502	B-14	1119.60	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/17/02	LF03503	T-15	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
03/17/02	LF03504	T-16	1146.60	Air	10.19	0.003	0	0	<13.12	<0.0044
03/17/02	LF03505	O-17	1148.40	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/17/02	LF03506	O-18	1174.20	Air	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)
03/17/02	LF03507	O-19	1033.60	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/17/02	LF03508	MPHS-20	1193.50	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/17/02	LF03509	B-13 Dup	1236.60	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/17/02	LF03510	Lot Blank	0.00	Air	NA(3)	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/17/02	LF03511	Trip Blank	0.00	Air	NA(3)	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to damaged/wet filter
R- Sample rejected due to insufficient material
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-17-02 rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/19/02 0757 to 2125

Data Validation Date: 03/24/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/19/02	LF03533	P-1	964.25	Air	<7.0	<0.003	0	0	<11.25	<0.0045
03/19/02	LF03534	P-2	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/19/02	LF03535	P-3	1236.90	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/19/02	LF03536	P-4	1224.00	Air	7.64	0.002	0	0	<15.75	<0.0050
03/19/02	LF03537	P-5	1048.80	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/19/02	LF03539	P-7	1079.75	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/19/02	LF03540	P-8	1163.75	Air	NA (1)	NA (1)	NA(2)	NA(2)	NA(2).	NA(2)
03/19/02	LF03541	W-12A	960.00	Air	38.22	0.015	****5	0	56.24	0.0226
03/19/02	LF03542	W-12B	1021.80	Air	<7.0	<0.003	0	***1	13.12	0.0049
03/19/02	LF03543	B-13	1186.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/19/02	LF03544	B-14	1057.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/19/02	LF03545	T-15	1296.00	Air	30.57	0.009	0	0	<15.75	<0.0047
03/19/02	LF03546	T-16	1224.00	Air	42.04	0.013	***1	***1	31.5	0.0099
03/19/02	LF03547	O-17	909.15	Air	<7.0	<0.003	0	0	<11.25	<0.0048
03/19/02	LF03548	O-18	990.00	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/19/02	LF03549	O-19	1030.20	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/19/02	LF03550	MPHS-20	1222.20	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/19/02	LF03551	P-4 Dup	1210.40	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/19/02	LF03552	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/19/02	LF03553	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample submitted for LF03538, Location P-6 due to pump fault

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to damaged/wet filter
R- Sample rejected due to insufficient material
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-19-02 rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/22/02 0715 to 2054

Data Validation Date: 03/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/22/02	LF03594	P-1	1065.60	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/22/02	LF03595	P-2	1168.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/22/02	LF03596	P-3	1155.60	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/22/02	LF03597	P-5	1026.00	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/22/02	LF03599	P-7	1251.00	Air	<7.0	<0.002	0	0	<13.12	<0.0040
03/22/02	LF03600	P-8	1157.40	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/22/02	LF03601	W-12A	1179.00	Air	<7.0	<0.002	***2	0	26.25	0.0086
03/22/02	LF03602	W-12B	1049.40	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/22/02	LF03603	B-13	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
03/22/02	LF03604	B-14	1103.90	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/22/02	LF03605	T-15	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
03/22/02	LF03606	T-16	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
03/22/02	LF03607	O-18	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/22/02	LF03608	O-19	1153.80	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/22/02	LF03609	MPHS-20	1134.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/22/02	LF03610	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/22/02	LF03611	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample Submitted for Locations P-4 and P-6 due to pump fault

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-22-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/23/02 0705 to 2045

Data Validation Date: 03/28/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/23/02	LF03612	P-1	1237.65	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/23/02	LF03613	P-2	1200.65	Air	8.92	0.003	***9	***4	170.6	0.0547
03/23/02	LF03614	P-3	1191.60	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/23/02	LF03615	P-4	1046.90	Air	<7.0	<0.003	0	***1	13.12	0.0048
03/23/02	LF03616	P-5	1265.40	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/23/02	LF03617	P-6	1092.60	Air	<7.0	<0.003	0	0	<13.12	<0.0046
03/23/02	LF03618	P-7	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/23/02	LF03619	P-8	1256.15	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/23/02	LF03620	W-12A	1296.85	Air	<7.0	<0.002	***7	***1	125.98	0.0374
03/23/02	LF03621	W-12B	1212.20	Air	<7.0	<0.002	***3	0	39.37	0.0125
03/23/02	LF03622	B-13	1206.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/23/02	LF03623	B-14	1404.00	Air	<7.0	<0.002	***1	***1	31.5	0.0086
03/23/02	LF03624	T-15	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/23/02	LF03625	T-16	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
03/23/02	LF03626	O-17	1126.80	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/23/02	LF03627	O-18	1148.55	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/23/02	LF03628	O-19	1184.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/23/02	LF03629	MPHS-20	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/23/02	LF03630	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/23/02	LF03631	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-23-02rev1.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/19/02**
Sampling Date and Time: 3/15/02 1200 to 2400

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400 f/mm^2	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm^2	TEM (AHERA) S~f/cc**
03/15/02	7093-18-0169	Park Row	1298	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/15/02	7093-19-0169	Chambers Street	1264	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	7093-15-0167	I.S. 143 Manhattan	1422	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/15/02	7094-09-0157	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/15/02	7096-12-0163	P.S. 199 (Queens)	1248	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/15/02	7095-98-0163	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/15/02	7097-18-0160	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 3/19/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
03/19/02	06010	B-13	Soil	<1% Amosite	10% Cellulose	80% Other
					10% Fiber Glass	
03/19/02	06011	B-13	Soil	None	10% Cellulose	80% Other
					10% Fiber Glass	
03/19/02	06012	B-14	Soil	None	10% Cellulose	80% Other
					10% Fiber Glass	
03/19/02	06013	B-14	Soil	None	10% Cellulose	80% Other
					10% Fiber Glass	
03/19/02	06014	LF-Sifter # 2	Soil	None	10% Cellulose	80% Other
					10% Fiber Glass	
03/19/02	06015	South Active Bank	Soil	None	10% Cellulose	80% Other
					10% Fiber Glass	

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

NYC Response
Asbestos Bulk Sampling Results for WTC NYC
Sampling Date : 3/26/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
03/26/02	Bulk -00040	North Tower	Soil	<1% Chrysotile	10.0% Glass 25.0% Cellulose	30.00% Quartz 15.00% Other 20.00% CA Carbonite
03/26/02	Bulk -00041	North Tower	Soil	<1% Chrysotile	10.0% Glass 35.0% Cellulose	25.00% Non-Fibrous(Other) 30.00% CA Carbonite
03/26/02	Bulk -00042	South Tower	Soil	None	70% Glass 5.0% Cellulose	25.00% Non-Fibrous(Other)
03/26/02	Bulk -00043	South Tower	Soil	None	60.0% Glass 15.0% Cellulose	25.00% Non-Fibrous(Other)
03/26/02	Bulk -00044	South Tower	Soil	<1% Chrysotile	10.0% Glass 20.0% Cellulose	40.00% Quartz 30.00% Non Fibrous (Other)
03/26/02	Bulk -00045	South Tower	Soil	None	20.0% Glass 15.0% Cellulose	20.00% Non-Fibrous 45.00% CA Carbonite
03/26/02	Bulk -00046	South Tower	Soil	<1% Chrysotile 1.70% Amosite	10.0% Glass 30.0% Cellulose	28.3% Non-Fibrous 30.00% CA Carbonite
03/26/02	Bulk -00047	South Tower	Soil	66.70% Amosite	10.0% Cellulose	23.30% Non-Fibrous (Other)

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, April 2, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on April 2

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 204 samples taken in and around ground zero from March 18 through March 24. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,457, with 18 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11 and March 9).

Air Sampling for Isocyanates - A total of 24 samples were collected on February 8 and February 12 at numerous locations in Lower Manhattan, including ground zero. Isocyanates were not detected.

Air Sampling for Silicates - A total of 20 samples were collected on February 14 and February 19 at several locations in Lower Manhattan. Silicates were not detected.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 18 samples were collected on March 25. All samples were below the AHERA school re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, April 2, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 18, 1200 hrs - Mar 19, 0255 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 19, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location F-duplicate) was not collected due to an equipment malfunction.

NYC / ER (Mar 19, 1200 hrs - Mar 20, 0200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 20, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 20, 1200 - 2400 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations U and Q) were not collected due to equipment malfunctions.

NYC / ER (Mar 21, 0001 - 1200 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations C and D) were not collected due to equipment malfunctions.

NYC / ER (Mar 21, 1200 - 2400 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations B and E) were not collected due to equipment malfunctions.

NYC / ER (Mar 22, 0001 - 1200 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Locations D and F) were not collected due to equipment malfunctions.

NYC / ER (Mar 22, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 23, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 23, 1200 - 2400 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
1 sample (Location Q) was not collected due to an equipment malfunction.
1 sample (Location L) was not collected since the sample cassette was stolen.

NYC / ER (Mar 24, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location B-duplicate) was not collected due to an equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 24)

Results pending.

Fresh Kills (Mar 25, 0729 - 2215 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location B-13) was not collected due to an equipment malfunction.

Ambient Air Sampling Locations

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Feb 8) - Isocyanates

12 samples (total) collected from the following locations: North Tower (west side), Vista Hotel, and Locations A, B, C, D, E, P, R, S, 3A from the fixed ambient air sampling stations.
Sampling period consisted of a 30-minute grab at each location.
All 12 samples did not detect any isocyanates.

NYC / ER (Feb 12) - Isocyanates

12 samples (total) collected from the following locations: North Tower (west side), Vista Hotel, and Locations A, B, C, D, E, P, R, S, 3A from the fixed ambient air sampling stations.
Sampling period consisted of a 30-minute grab at each location.
All 12 samples did not detect any isocyanates.

NYC / ER (Feb 14) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Feb 19) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/20/02**
Sampling Date and Time: 3/18/02 1200 to 3/19/2002 0255

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/18/02	TTW-01634	W	1476	Air	10.19	0.003	0	0	<16.00	<0.0042
03/18/02	TTW-01635	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01636	E	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01637	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01638	U	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01639	V	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01640	K	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/18/02	TTW-01641	K-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01642	D	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/18/02	TTW-01643	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01644	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01645	A	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/18/02	TTW-01646	A-Dup	1692	Air	<7.0	<0.002	0	0	<20.00	<0.0046
03/18/02	TTW-01647	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01648	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01649	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	TTW-01650	M1	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/18/02	TTW-01651	L	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048

Due to a pump malfunction , TTW-01635 was restarted at 1455

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-18-02-pm rev1.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/25/2002**
Sampling Date and Time: **3/19/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/19/02	FB031902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/19/02	TB031902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/19/02	TTW-01652	W	1440	Air	8.28	0.002	***2	0	32	0.0086
03/19/02	TTW-01653	Q	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/19/02	TTW-01654	E	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/19/02	TTW-01655	S	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/19/02	TTW-01656	U	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01657	V	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01658	K	1440	Air	12.74	0.003	***1	0	16	0.0043
03/19/02	TTW-01659	D	1512	Air	10.19	0.003	******1	0	16	0.0041
03/19/02	TTW-01660	C	1584	Air	<7	<0.002	0	0	<16	<0.0039
03/19/02	TTW-01661	B	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01662	A	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01663	F	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/19/02	TTW-01664	J	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/19/02	TTW-01665	J-Dup	1330.45	Air	<7	<0.002	0	0	<16	<0.0046
03/19/02	TTW-01666	N	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/19/02	TTW-01667	M1	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01668	L	1404	Air	<7	<0.002	0	0	<16	<0.0044

No Sample Submitted for Location F-Dup due to pump malfunction

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
******Tremolite

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-19-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/24/02**
Sampling Date and Time: 3/19/02 1200 to 3/20/02 0200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/19/02	TTW-01669	W	1440	Air	8.28	0.002	0	***1	16	0.0043
03/19/02	TTW-01670	Q	1440	Air	8.92	0.002	***1	0	16	0.0043
03/19/02	TTW-01671	E	1368	Air	<7	<0.002	0	0	<16	<0.0045
03/19/02	TTW-01672	E-Dup	1260	Air	<7	<0.002	0	0	<16	<0.0049
03/19/02	TTW-01673	S	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01674	U	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01675	V	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/19/02	TTW-01676	K	1440	Air	9.55	0.003	0	0	<16	<0.0043
03/19/02	TTW-01677	D	1476	Air	19.11	0.005	0	0	<16	<0.0042
03/19/02	TTW-01678	D-Dup	1656	Air	16.56	0.004	0	0	<16	<0.0037
03/19/02	TTW-01679	C	1440	Air	12.1	0.003	0	0	<16	<0.0043
03/19/02	TTW-01680	B	1440	Air	7.64	0.002	0	0	<16	<0.0043
03/19/02	TTW-01681	A	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01682	F	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01683	J	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/19/02	TTW-01684	N	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/19/02	TTW-01685	M1	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/19/02	TTW-01686	L	1656	Air	<7	<0.002	0	0	<20	<0.0046

Due to pump malfunction, Location D-Dup was restarted at 1400.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-19-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/25/2002**
Sampling Date and Time: 3/20/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/20/02	FB032002	Field Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
03/20/02	TB032002	Trip Blank	0	Air	<7.0	n/a	NA[2]	NA[2]	NA[2]	NA[2]
03/20/02	TTW-01687	W	1440	Air	12.74	0.003	0	0	<16	<0.0043
03/20/02	TTW-01688	Q	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/20/02	TTW-01689	E	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01690	S	966	Air	<7	<0.003	0	0	<11.43	<0.0046
03/20/02	TTW-01691	U	1078.3	Air	<7	<0.002	0	0	<13.33	<0.0048
03/20/02	TTW-01692	V	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01693	K	1440	Air	10.19	0.003	0	0	<16	<0.0043
03/20/02	TTW-01694	D	1440	Air	25.48	0.007	0	0	<16	<0.0043
03/20/02	TTW-01695	C	1548	Air	<7	<0.002	0	0	<16	<0.0040
03/20/02	TTW-01696	C-Dup	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01697	B	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/20/02	TTW-01698	B-Dup	1242.15	Air	<7	<0.002	0	0	<16	<0.0050
03/20/02	TTW-01699	A	1080	Air	<7	<0.002	0	0	<13.33	<0.0048
03/20/02	TTW-01700	F	1368	Air	<7	<0.002	0	0	<16	<0.0045
03/20/02	TTW-01701	J	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01702	N	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/20/02	TTW-01703	M1	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01704	L	1440	Air	<7	<0.002	0	0	<16	<0.0043

Sampling Locations:
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C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA[1] - Not analyzed due to overloading of particulates
NA[2] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
******Tremolite

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-20-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/24/02**
Sampling Date and Time: 3/20/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/20/02	TTW-01705	W	1440	Air	8.92	0.002	0	0	<16	<0.0043
03/20/02	TTW-01706	E	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/20/02	TTW-01707	S	440.8	Air	<7	<0.006	0	0	<16	<0.0140
03/20/02	TTW-01708	S-Dup	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01709	V	1368	Air	<7	<0.002	0	0	<16	<0.0045
03/20/02	TTW-01710	K	1404	Air	8.28	0.002	0	0	<16	<0.0044
03/20/02	TTW-01711	D	1440	Air	15.29	0.004	0	0	<16	<0.0043
03/20/02	TTW-01712	C	475.6	Air	<7	<0.006	0	0	<8	<0.0065
03/20/02	TTW-01713	B	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01714	A	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01715	A-Dup	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/20/02	TTW-01716	F	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01717	J	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/20/02	TTW-01718	N	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01719	M1	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/20/02	TTW-01720	L	1404	Air	<7	<0.002	0	0	<16	<0.0044

No Sample submitted for Location Q and U due to flow fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/25/2002**
Sampling Date and Time: **3/21/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/21/02	FB032102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/21/02	TB032102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/21/02	TTW-01721	W	1476	Air	7.64	0.002	0	0	<16	<0.0042
03/21/02	TTW-01722	Q	1368	Air	<7	<0.002	0	0	<16	<0.0045
03/21/02	TTW-01723	E	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01724	E-Dup	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01725	S	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/21/02	TTW-01726	U	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01727	V	1476	Air	14.01	0.004	0	0	<16	<0.0042
03/21/02	TTW-01728	K	1404	Air	13.38	0.004	0	0	<16	<0.0044
03/21/02	TTW-01729	D-Dup	1332	Air	<7	<0.002	0	0	<16	<0.0046
03/21/02	TTW-01730	B	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01731	A	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/21/02	TTW-01732	F	1152	Air	<7	<0.002	0	0	<13.33	<0.0045
03/21/02	TTW-01733	J	1512	Air	<7	<0.002	0	0	<16	<0.0041
03/21/02	TTW-01734	N	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/21/02	TTW-01735	M1	1476	Air	<7	<0.002	0	0	<16	<0.0042
03/21/02	TTW-01736	L	1440	Air	<7	<0.002	0	0	<16	<0.0043

No Sample Submitted for Location D and C due to pump malfunction

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
******Tremolite

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/25/02**
Sampling Date and Time: 3/21/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S-f/cc**
03/21/02	TTW-01737	W	1476	Air	21.66	0.006	***1	0	16	0.0042
03/21/02	TTW-01738	Q	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01739	S	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01740	U	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01741	V	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/21/02	TTW-01742	K	1404	Air	7.01	0.002	0	0	<16	<0.0044
03/21/02	TTW-01743	D	1440	Air	12.1	0.003	0	0	<16	<0.0043
03/21/02	TTW-01744	C	1440	Air	8.92	0.002	0	0	<16	<0.0043
03/21/02	TTW-01745	A	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01746	F	1440	Air	10.19	0.003	0	0	<16	<0.0043
03/21/02	TTW-01747	F-Dup	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01748	J-Dup	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01749	J	1440	Air	<7	<0.002	***1	0	16	0.0043
03/21/02	TTW-01750	N	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01751	M1	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/21/02	TTW-01752	L	1440	Air	<7	<0.002	***1	0	16	0.0043

No Sample submitted for Location E due to pump frozen
No Sample Submitted for Location B due to pump fault

Sampling Locations:
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B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-21-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/25/2002**
Sampling Date and Time: **3/22/02 0001 to 1200**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
03/22/02	FB032202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/22/02	TB032202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/22/02	TTW-01755	Q	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01756	Q-Dup	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01757	W	1440	Air	12.74	0.003	0	0	<16	<0.0043
03/22/02	TTW-01758	E	1404	Air	<7	<0.002	0	0	<16	<0.0044
03/22/02	TTW-01759	S	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01760	U	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01761	V	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01762	K	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01763	K-Dup	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01764	C	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01765	B	1368	Air	<7	<0.002	0	0	<16	<0.0045
03/22/02	TTW-01766	A	1214.85	Air	7.64	0.002	0	0	<13.33	<0.0042
03/22/02	TTW-01767	J	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01768	N	1440	Air	<7	<0.002	0	0	<16	<0.0043
03/22/02	TTW-01769	M1	1374	Air	<7	<0.002	0	0	<16	<0.0045
03/22/02	TTW-01770	L	1440	Air	<7	<0.002	0	0	<16	<0.0043

No Sample Submitted for Location D and F due to pump malfunction

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted
******Tremolite

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/28/02**
Sampling Date and Time: 3/22/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/22/02	TTW-01773	W	1440	Air	33.12	0.009	***2	***1	48	0.0128
03/22/02	TTW-01774	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01775	Q-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01776	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01777	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01778	U	1330	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/22/02	TTW-01779	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01780	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01781	D	1440	Air	<7.0	<0.002	*****1	0	16	0.0043
03/22/02	TTW-01782	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01783	B	1440	Air	<7.0	<0.002	***1	0	16	0.0043
03/22/02	TTW-01784	A	1360	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/22/02	TTW-01785	F	1440	Air	<7.0	<0.002	***1	0	16	0.0043
03/22/02	TTW-01786	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01787	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01788	N-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01789	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	TTW-01790	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-22-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/28/2002**
Sampling Date and Time: **3/23/02 0001 to 1200**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm^2	f/cc	Structures (#) 0.5μ - 5μ	Structures (#) 5μ	S/mm^2	S~f/cc**
03/23/02	FB032302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/23/02	TB032302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/23/02	TTW-01791	W	1440	Air	20.38	0.005	***1	0	16	0.0043
03/23/02	TTW-01792	Q	1440	Air	<7.0	<0.002	0	***1	16	0.0043
03/23/02	TTW-01793	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01794	S	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/23/02	TTW-01795	U	1365	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/23/02	TTW-01796	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01797	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01798	D	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/23/02	TTW-01799	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01800	B	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01801	A	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/23/02	TTW-01802	F	1232	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/23/02	TTW-01803	J	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/23/02	TTW-01804	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01805	N-Dup	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/23/02	TTW-01806	M1	1368	Air	<7.0	<0.002	0	***2	32	0.0090
03/23/02	TTW-01807	M1-Dup	1230	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/23/02	TTW-01808	L	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044

Sampling Locations:
A: NE corner of West Broadway & Barclay
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C1: SW corner of Broadway & Liberty St.
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-23-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/28/02**
Sampling Date and Time: **3/23/02 1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/23/02	TTW-01809	W	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01811	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01812	E-Dup	1728	Air	<7.0	<0.002	0	0	<20.00	<0.0045
03/23/02	TTW-01813	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01814	U	1368	Air	7.01	0.002	0	0	<16.00	<0.0045
03/23/02	TTW-01815	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01816	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01817	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01818	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01819	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01820	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01821	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	TTW-01822	J	1140	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/23/02	TTW-01823	N	1029	Air	<7.0	<0.003	0	0	<13.33	<0.0050
03/23/02	TTW-01824	M1	1620	Air	<7.0	<0.002	***1	0	16	0.0038
03/23/02	TTW-01826	L-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample submitted for Location Q and L due to pump fault and stolen sample cassette

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/28/2002**
Sampling Date and Time: 3/24/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/24/02	FB032402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/24/02	TB032402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/24/02	TTW-01827	W	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01828	Q	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/24/02	TTW-01829	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01830	S	1440	Air	<7.0	<0.002	***1	0	16	0.0043
03/24/02	TTW-01831	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01832	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01833	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01834	K-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01835	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01836	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01837	B	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/24/02	TTW-01839	A	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/24/02	TTW-01840	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01841	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01842	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/24/02	TTW-01843	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01844	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample submitte for B-Dup due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-24-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/25/02 0729 to 2215

Data Validation Date: 03/30/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/25/02	LF03653	P-1	1112.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/25/02	LF03654	P-2	1017.00	Air	<7.0	<0.003	0	0	<13.12	<0.0050
03/25/02	LF03655	P-3	1243.80	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/25/02	LF03656	P-4	676.80	Air	<7.0	<0.004	0	0	<8.75	<0.0050
03/25/02	LF03657	P-5	1204.35	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/25/02	LF03658	P-6	1015.20	Air	<7.0	<0.003	0	0	<11.25	<0.0043
03/25/02	LF03659	P-7	1382.40	Air	<7.0	<0.002	***1	0	15.75	0.0044
03/25/02	LF03660	P-8	1253.00	Air	<7.0	<0.002	***1	0	15.75	0.0048
03/25/02	LF03661	W-12A	1146.60	Air	45.86	0.015	***1	0	13.12	0.0044
03/25/02	LF03662	W-12B	1197.00	Air	7.64	0.002	0	0	<13.12	<0.0042
03/25/02	LF03664	B-14	1215.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/25/02	LF03665	T-15	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/25/02	LF03666	T-16	1296.00	Air	11.46	0.003	***1	0	15.75	0.0047
03/25/02	LF03667	O-17	1035.00	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/25/02	LF03668	O-18	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/25/02	LF03669	O-19	1249.20	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/25/02	LF03670	MPHS-20	1254.75	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/25/02	LF03671	P-8 Dup	1233.00	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/25/02	LF03672	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/25/02	LF03673	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No sample submitted for LF03663, Location B-13 due to pump fault

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-25-02.xls

WTC Emergency Response
Air Samples - Isocyanate Results-Total of Front and Back
Sampling Date 2/08/02

Sample No.	Method Blank		122186				122529				122532				122535				122540				122542			
Sampling Location	Lab		P				C				B				R				Vista Hotel				A			
Sample Volume (L)	0		60				60				60				60				60				60			
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³
MDI Monomer	U	0.040	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067
2,4-TDI Monomer	U	0.030	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050
2,6-TDI Monomer	U	0.030	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050
HDI Monomer	U	0.030	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050
HMDI Monomer	U	0.040	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067
IPDI Monomer	U	0.15	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025

COC# 020802-Isocyanate
Note: No MDI and HDI Oligomers were observed during the review of the chromatographs by the analyst.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/26/02

2-08-02Isocyanateair.xls

WTC Emergency Response
Air Samples - Isocyanate Results-Total of Front and Back
Sampling Date 2/08/02

Sample No.	122543				122544				122547				122550				122557				122562				12252	
Sampling Location	R				3A				North tower-west side				E				D				S				Field Blank	
Sample Volume (L)	60				60				60				60				60				60				0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg
MDI Monomer	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040
2,4-TDI Monomer	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030
2,6-TDI Monomer	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030
HDI Monomer	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030
HMDI Monomer	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040
IPDI Monomer	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15

COC# 02/08/02-Isocyanate

Note: No MDI and HDI Oligomers were observed during the review of the chromatographs by the analyst.

WTC Emergency Response
Air Samples - Isocyanate Results-Total of Front and Back
Sampling Date 2/12/02

Sample No.	Method Blank		122530				122534				122536				12253B				122539				122548			
Sampling Location	Lab		Vista Hotel				North tower-west side				D				A				E				B			
Sample Volume (L)	0		60				60				60				60				60				60			
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³	µg	µg	mg/m³	mg/m³
MDI Monomer	U	0.040	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067
2,4-TDI Monomer	U	0.030	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050
2,6-TDI Monomer	U	0.030	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050
HDI Monomer	U	0.030	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050
HMDI Monomer	U	0.040	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067
IPDI Monomer	U	0.15	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025

COC# 02/12/02-Isocyanate

Note: No MDI and HDI Oligomers were observed during the review of the chromatographs by the analyst.

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 3/26/02

1202

WTC Emergency Response
Air Samples - Isocyanate Results-Total of Front and Back
Sampling Date 2/12/02

Sample No.	122551				122554				122555				122558				122561				122563				122559	
Sampling Location	S				P				Vista Hotel				3A				R				C				Field Blank	
Sample Volume (L)	60				60				60				60				60				60				0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg	mg/m3	mg/m3	µg	µg
MDI Monomer	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040
2,4-TDI Monomer	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030
2,6-TDI Monomer	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030
HDI Monomer	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030	U	0.00050	U	0.030
HMDI Monomer	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040	U	0.00067	U	0.040
IPDI Monomer	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15	U	0.0025	U	0.15

COC# 02/12/02-Isocyanate

Note: No MDI and HDI Oligomers were observed during the review of the chromatographs by the analyst.

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, April 3, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:00 p.m. on April 3

Lower Manhattan:

Air Sampling for Particulates - EPA collected samples from March 27 through March 30, and on April 1, at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for Metals - A total of 9 samples were collected on January 31 at various locations in Lower Manhattan. All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Air Sampling for PAH's - A total of 30 samples were collected on March 12, 14 and 19 at several locations in Lower Manhattan. PAH's were not detected.

Air Sampling for Silicates - A total of 20 samples were collected on March 14 and March 19 at several locations in Lower Manhattan. Silicates were not detected.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted from March 27 through April 3 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOCs where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from March 27 through April 3 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 31 samples were collected on March 26 and March 27. All samples showed results less than 70 structures per square millimeter, which is the Asbestos

Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

Air Monitoring for Particulates - There were no significant readings from samples collected on March 28, March 29, April 1 and April 2.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, April 3, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 24)

Results pending.

Fresh Kills (Mar 26, 0750 - 2249 hrs)

All 13 samples analyzed were below the TEM AHERA standard.
6 samples (Locations P-2, P-3, P-4, P-5, O-18, and O-19) were not analyzed due to wet filters.

Fresh Kills (Mar 27, 0745 - 2342 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location P-2) was not analyzed due to an equipment malfunction.

Fresh Kills (Mar 28) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Mar 29) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-3, P-5, and P-6) based on daily average concentrations.
Particulate monitoring was not conducted at Location P-8 due to an equipment malfunction.

Fresh Kills (Mar 30) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted due to weather conditions.

Fresh Kills (Mar 31) - Particulate Monitoring (Dataram)

Particulate monitoring was not conducted.

Fresh Kills (Apr 1) - Particulate Monitoring (Dataram)

Nothing of significance reported at three stations (P-2, P-3 and P-8) based on daily average concentrations.
Particulate monitoring was not conducted at Locations P-5 and P-6 due to equipment malfunctions.

Fresh Kills (Apr 2) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-3, P-5, and P-8) based on daily average concentrations.
Particulate monitoring was not conducted at Location P-6 due to an equipment malfunction.

Ambient Air Sampling Locations

NYC / ER (March 5) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (March 7) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (March 12) - Dioxin

All 9 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
1 sample (Location B) was not submitted for analysis.
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (March 14) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 31) - Metals

9 samples collected.
1 sample (Location C) was not collected due to damaged sampling equipment.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

NYC / ER (Mar 12) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Mar 14) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Mar 19) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Mar 14) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Mar 19) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 27) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 11.41 ug/m^3 with a maximum reading of 41.72 ug/m^3.
Station N had an average of 10.67 ug/m^3 with a maximum reading of 55.62 ug/m^3.
Station R had an average of 14.09 ug/m^3 with a maximum reading of 65.21 ug/m^3.

NYC / ER (Mar 28) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 17.14 ug/m^3 with a maximum reading of 46.28 ug/m^3.
Station N had an average of 12.58 ug/m^3 with a maximum reading of 51.57 ug/m^3.

Station R had an average of 19.24 ug/m^3 with a maximum reading of 52.19 ug/m^3.

NYC / ER (Mar 29) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 41.54 ug/m^3 with a maximum reading of 102.01 ug/m^3.
Station N had an average of 33.63 ug/m^3 with a maximum reading of 281.13 ug/m^3.
Station R had an average of 34.29 ug/m^3 with a maximum reading of 64.63 ug/m^3.

NYC / ER (Mar 30) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 7 hours.
Station L had an average of 64.46 ug/m^3 with a maximum reading of 163.06 ug/m^3.
Station N had an average of 57.38 ug/m^3 with a maximum reading of 227.42 ug/m^3.
Station R had an average of 59.62 ug/m^3 with a maximum reading of 94.72 ug/m^3.

NYC / ER (Mar 31) - Particulate Monitoring (Dataram)

Particulate measurements were not conducted at Locations L, N, and R due to the weather conditions.

NYC / ER (Apr 1) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated nearly 8 hours.
Station L had an average of 21.08 ug/m^3 with a maximum reading of 58.31 ug/m^3.
Station N had an average of 18.64 ug/m^3 with a maximum reading of 60.28 ug/m^3.
Station R had an average of 18.85 ug/m^3 with a maximum reading of 77.25 ug/m^3.

NYC / ER (Mar 27) - Volatile Organics (Mobile Laboratory)

Aside from a few compounds detected at one location (South Tower), no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 28) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 29) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 30) - Volatile Organics (Mobile Laboratory)

Aside from two compounds detected at the North and South Tower locations, no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Mar 31) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 1) - Volatile Organics (Mobile Laboratory)

Aside from one compound detected at the North Tower location, no other volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 2) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 3) - Volatile Organics (Mobile Laboratory)

Aside from one compound detected at the North Tower location, no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/26/02 0750 to 2249

Data Validation Date: 03/30/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/26/02	LF03674	P-1	1092.60	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/26/02	LF03675	P-2	648.00	Air	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)
03/26/02	LF03676	P-3	1296.00	Air	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)
03/26/02	LF03677	P-4	1103.40	Air	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)
03/26/02	LF03678	P-5	1171.80	Air	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)
03/26/02	LF03679	P-6	423.90	Air	<7.0	<0.006	0	0	<7.87	<0.0072
03/26/02	LF03680	P-7	1089.70	Air	<7.0	<0.002	0	0	<13.12	<0.0046
03/26/02	LF03681	P-8	1306.80	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/26/02	LF03682	W-12A	1128.60	Air	7.64	0.003	***4	***1	65.62	0.0224
03/26/02	LF03683	W-12B	1219.15	Air	<7.0	<0.002	0	0	<13.12	<0.0041
03/26/02	LF03684	B-13	1063.80	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/26/02	LF03685	B-14	583.20	Air	<7.0	<0.005	0	0	<7.87	<0.0052
03/26/02	LF03686	T-15	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/26/02	LF03687	T-16	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/26/02	LF03688	O-17	939.75	Air	<7.0	<0.003	0	0	<11.25	<0.0048
03/26/02	LF03689	O-18	98.10	Air	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)
03/26/02	LF03690	O-19	486.00	Air	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)	NA (3)
03/26/02	LF03691	MPHS-20	1081.80	Air	<7.0	<0.002	0	0	<13.12	<0.0047
03/26/02	LF03692	P-4 Dup	1260.00	Air	<7.0	<0.002	0	0	<13.12	<0.0040
03/26/02	LF03693	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/26/02	LF03694	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-26-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/27/02 0745 to 2342

Data Validation Date: 03/30/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/27/02	LF03695	P-1	1202.40	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/27/02	LF03697	P-3	1215.00	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/27/02	LF03698	P-4	1184.40	Air	<7.0	<0.002	***1	0	13.12	0.0043
03/27/02	LF03699	P-5	1171.80	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/27/02	LF03700	P-6	761.25	Air	<7.0	<0.004	0	0	<7.87	<0.0040
03/27/02	LF03701	P-7	1080.00	Air	<7.0	<0.002	0	0	<13.12	<0.0047
03/27/02	LF03702	P-8	1320.10	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/27/02	LF03703	W-12A	1123.20	Air	8.92	0.003	0	***3	39.37	0.0135
03/27/02	LF03704	W-12B	1191.40	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/27/02	LF03705	B-13	1081.80	Air	<7.0	<0.002	0	0	<13.12	<0.0047
03/27/02	LF03706	B-14	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/27/02	LF03707	T-15	1296.00	Air	<7.0	<0.002	***1	0	15.75	0.0047
03/27/02	LF03708	T-16	1296.00	Air	7.64	0.002	0	0	<15.75	<0.0047
03/27/02	LF03709	O-17	1072.50	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/27/02	LF03710	O-18	1126.80	Air	<7.0	<0.002	0	0	<1.21	<0.0004
03/27/02	LF03711	O-19	993.60	Air	<7.0	<0.003	0	0	<11.25	<0.0044
03/27/02	LF03712	MPHS-20	1221.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
03/27/02	LF03713	P-1 Dup	1193.40	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/27/02	LF03714	Lot Blank	0.00	Air	<7.0	n/a	NA(3)	NA(2)	NA(2)	NA(2)
03/27/02	LF03715	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample was submitted for Location P-2, Sample # LF03696 due to pump fault

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-27-02.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/19/02

Sample No.	06901		06902		06903		06904		06905	
Sampling Location	Location R		Location E		Location P		Location S		Location S	
Volume (L)	914.3		818		912		872.95		857.15	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.6	U	1.8	U	1.6	U	1.6	U	1.7
2-Methylnaphthalene	U	1.4	U	1.6	U	1.4	U	1.5	U	1.5
1-Methylnaphthalene	U	1.4	U	1.6	U	1.4	U	1.5	U	1.5
Biphenyl	U	1.3	U	1.5	U	1.3	U	1.4	U	1.4
2,6-Dimethylnaphthalene	U	1.3	U	1.4	U	1.3	U	1.3	U	1.4
Acenaphthylene	U	1.3	U	1.5	U	1.3	U	1.4	U	1.4
Acenaphthene	U	1.3	U	1.5	U	1.3	U	1.4	U	1.4
Dibenzofuran	U	1.2	U	1.3	U	1.2	U	1.3	U	1.3
Fluorene	U	1.2	U	1.4	U	1.2	U	1.3	U	1.3
Phenanthrene	U	1.1	U	1.3	U	1.1	U	1.2	U	1.2
Anthracene	U	1.1	U	1.3	U	1.1	U	1.2	U	1.2
Carbazole	U	1.2	U	1.3	U	1.2	U	1.3	U	1.3
Fluoranthene	U	0.99	U	1.1	U	1.0	U	1.0	U	1.1
Pyrene	U	0.99	U	1.1	U	1.0	U	1.0	U	1.1
Benzo[a]anthracene	U	0.88	U	0.98	U	0.88	U	0.92	U	0.94
Chrysene	U	0.88	U	0.98	U	0.88	U	0.92	U	0.94
Benzo[b]fluoranthene	U	0.80	U	0.89	U	0.80	U	0.83	U	0.85
Benzo[k]fluoranthene	U	0.80	U	0.89	U	0.80	U	0.83	U	0.85
Benzo[e]pyrene	U	0.80	U	0.89	U	0.80	U	0.83	U	0.85
Benzo[a]pyrene	U	0.80	U	0.89	U	0.80	U	0.83	U	0.85
Indeno(1,2,3-c,d)pyrene	U	0.73	U	0.81	U	0.73	U	0.76	U	0.78
Dibenzo[a,h]anthracene	U	0.72	U	0.81	U	0.72	U	0.76	U	0.77
Benzo[g,h,i]perylene	U	0.73	U	0.81	U	0.73	U	0.76	U	0.78

COC: 03/19/02-PAHs ERT: 4/1/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-19-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/19/02										
Sample No.	06906		06907		06908		06909		06910	
Sampling Location	Location D		Location C		Location B		Location 3A		Location A	
Volume (L)	936		830.3		837.4		944.05		863.08	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.7	U	1.7	U	1.5	U	1.7
2-Methylnaphthalene	U	1.4	U	1.6	U	1.5	U	1.4	U	1.5
1-Methylnaphthalene	U	1.4	U	1.6	U	1.5	U	1.4	U	1.5
Biphenyl	U	1.3	U	1.4	U	1.4	U	1.3	U	1.4
2,6-Dimethylnaphthalene	U	1.3	U	1.4	U	1.4	U	1.2	U	1.4
Acenaphthylene	U	1.3	U	1.5	U	1.4	U	1.3	U	1.4
Acenaphthene	U	1.3	U	1.4	U	1.4	U	1.3	U	1.4
Dibenzofuran	U	1.2	U	1.3	U	1.3	U	1.2	U	1.3
Fluorene	U	1.2	U	1.3	U	1.3	U	1.2	U	1.3
Phenanthrene	U	1.1	U	1.2	U	1.2	U	1.1	U	1.2
Anthracene	U	1.1	U	1.2	U	1.2	U	1.1	U	1.2
Carbazole	U	1.2	U	1.3	U	1.3	U	1.2	U	1.3
Fluoranthene	U	0.97	U	1.1	U	1.1	U	0.96	U	1.1
Pyrene	U	0.97	U	1.1	U	1.1	U	0.96	U	1.1
Benzo[a]anthracene	U	0.86	U	0.97	U	0.96	U	0.85	U	0.93
Chrysene	U	0.86	U	0.97	U	0.96	U	0.85	U	0.93
Benzo[b]fluoranthene	U	0.78	U	0.88	U	0.87	U	0.77	U	0.84
Benzo[k]fluoranthene	U	0.78	U	0.88	U	0.87	U	0.77	U	0.84
Benzo[e]pyrene	U	0.78	U	0.88	U	0.87	U	0.77	U	0.84
Benzo[a]pyrene	U	0.78	U	0.88	U	0.87	U	0.77	U	0.84
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.80	U	0.79	U	0.70	U	0.77
Dibenzo[a,h]anthracene	U	0.70	U	0.79	U	0.79	U	0.70	U	0.76
Benzo[g,h,i]perylene	U	0.71	U	0.80	U	0.79	U	0.70	U	0.77

COC: 03/19/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-19-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/19/02				
Sample No.	06911		06912	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/19/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-19-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/12/02										
Sample No.	06877		06878		06879		06880		06881	
Sampling Location	Location R		Location E		Location P		Location S		Location D	
Volume (L)	845.08		808.2		894.68		908.7		942.08	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.7	U	1.8	U	1.6	U	1.6	U	1.5
2-Methylnaphthalene	U	1.5	U	1.6	U	1.4	U	1.4	U	1.4
1-Methylnaphthalene	U	1.5	U	1.6	U	1.4	U	1.4	U	1.4
Biphenyl	U	1.4	U	1.5	U	1.3	U	1.3	U	1.3
2,6-Dimethylnaphthalene	U	1.4	U	1.5	U	1.3	U	1.3	U	1.2
Acenaphthylene	U	1.4	U	1.5	U	1.3	U	1.3	U	1.3
Acenaphthene	U	1.4	U	1.5	U	1.3	U	1.3	U	1.3
Dibenzofuran	U	1.3	U	1.4	U	1.2	U	1.2	U	1.2
Fluorene	U	1.3	U	1.4	U	1.2	U	1.2	U	1.2
Phenanthrene	U	1.2	U	1.3	U	1.2	U	1.1	U	1.1
Anthracene	U	1.2	U	1.3	U	1.2	U	1.1	U	1.1
Carbazole	U	1.3	U	1.4	U	1.2	U	1.2	U	1.2
Fluoranthene	U	1.1	U	1.1	U	1.0	U	1.0	U	0.96
Pyrene	U	1.1	U	1.1	U	1.0	U	1.0	U	0.96
Benzo[a]anthracene	U	0.95	U	1.0	U	0.90	U	0.89	U	0.85
Chrysene	U	0.95	U	1.0	U	0.90	U	0.89	U	0.85
Benzo[b]fluoranthene	U	0.86	U	0.90	U	0.81	U	0.80	U	0.77
Benzo[k]fluoranthene	U	0.86	U	0.90	U	0.81	U	0.80	U	0.77
Benzo[e]pyrene	U	0.86	U	0.90	U	0.81	U	0.80	U	0.77
Benzo[a]pyrene	U	0.86	U	0.90	U	0.81	U	0.80	U	0.77
Indeno(1,2,3-c,d)pyrene	U	0.79	U	0.82	U	0.74	U	0.73	U	0.71
Dibenzo[a,h]anthracene	U	0.78	U	0.82	U	0.74	U	0.73	U	0.70
Benzo[g,h,i]perylene	U	0.79	U	0.82	U	0.74	U	0.73	U	0.71

COC: 03/12/02-PAHs

U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-12-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/12/02										
Sample No.	06882		06883		06884		06885		06886	
Sampling Location	Location D		Location C		Location B		Location 3A		Location A	
	948		872.95		936		1008.7		834.6	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.6	U	1.5	U	1.4	U	1.7
2-Methylnaphthalene	U	1.4	U	1.5	U	1.4	U	1.3	U	1.5
1-Methylnaphthalene	U	1.4	U	1.5	U	1.4	U	1.3	U	1.5
Biphenyl	U	1.3	U	1.4	U	1.3	U	1.2	U	1.4
2,6-Dimethylnaphthalene	U	1.2	U	1.3	U	1.3	U	1.2	U	1.4
Acenaphthylene	U	1.3	U	1.4	U	1.3	U	1.2	U	1.4
Acenaphthene	U	1.3	U	1.4	U	1.3	U	1.2	U	1.4
Dibenzofuran	U	1.2	U	1.3	U	1.2	U	1.1	U	1.3
Fluorene	U	1.2	U	1.3	U	1.2	U	1.1	U	1.3
Phenanthrene	U	1.1	U	1.2	U	1.1	U	1.0	U	1.2
Anthracene	U	1.1	U	1.2	U	1.1	U	1.0	U	1.2
Carbazole	U	1.2	U	1.3	U	1.2	U	1.1	U	1.3
Fluoranthene	U	0.96	U	1.0	U	0.97	U	0.90	U	1.1
Pyrene	U	0.96	U	1.0	U	0.97	U	0.90	U	1.1
Benzo[a]anthracene	U	0.85	U	0.92	U	0.86	U	0.80	U	0.96
Chrysene	U	0.85	U	0.92	U	0.86	U	0.80	U	0.96
Benzo[b]fluoranthene	U	0.77	U	0.83	U	0.78	U	0.72	U	0.87
Benzo[k]fluoranthene	U	0.77	U	0.83	U	0.78	U	0.72	U	0.87
Benzo[e]pyrene	U	0.77	U	0.83	U	0.78	U	0.72	U	0.87
Benzo[a]pyrene	U	0.77	U	0.83	U	0.78	U	0.72	U	0.87
Indeno(1,2,3-c,d)pyrene	U	0.70	U	0.76	U	0.71	U	0.66	U	0.80
Dibenzo[a,h]anthracene	U	0.70	U	0.76	U	0.70	U	0.65	U	0.79
Benzo[g,h,i]perylene	U	0.70	U	0.76	U	0.71	U	0.66	U	0.80

COC: 03/12/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-12-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/12/02				
Sample No.	06887		06888	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/12/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-12-02PAH.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/14/02

Sample No.	06889		06890		06891		06892		06893	
Sampling Location	Location R		Location E		Location P		Location S		Location D	
Volume (L)	932.2		933.63		948		908.7		859.13	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.5	U	1.5	U	1.6	U	1.7
2-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5
1-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5
Biphenyl	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
2,6-Dimethylnaphthalene	U	1.3	U	1.3	U	1.2	U	1.3	U	1.4
Acenaphthylene	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
Acenaphthene	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
Dibenzofuran	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Fluorene	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Phenanthrene	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2
Anthracene	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2
Carbazole	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Fluoranthene	U	0.97	U	0.97	U	0.96	U	1.0	U	1.1
Pyrene	U	0.97	U	0.97	U	0.96	U	1.0	U	1.1
Benzo[a]anthracene	U	0.86	U	0.86	U	0.85	U	0.89	U	0.94
Chrysene	U	0.86	U	0.86	U	0.85	U	0.89	U	0.94
Benzo[b]fluoranthene	U	0.78	U	0.78	U	0.77	U	0.80	U	0.85
Benzo[k]fluoranthene	U	0.78	U	0.78	U	0.77	U	0.80	U	0.85
Benzo[e]pyrene	U	0.78	U	0.78	U	0.77	U	0.80	U	0.85
Benzo[a]pyrene	U	0.78	U	0.78	U	0.77	U	0.80	U	0.85
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.71	U	0.70	U	0.73	U	0.77
Dibenzo[a,h]anthracene	U	0.71	U	0.71	U	0.70	U	0.73	U	0.77
Benzo[g,h,i]perylene	U	0.71	U	0.71	U	0.70	U	0.73	U	0.77

COC: 03/14/02-PAHs ERT: 3/28/02
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-14-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/14/02

Sample No.	06894		06895		06896		06897		06898	
Sampling Location	Location D		Location C		Location B		Location 3A		Location A	
	948		948		948		816		948	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.5	U	1.5	U	1.8	U	1.5
2-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.6	U	1.4
1-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.6	U	1.4
Biphenyl	U	1.3	U	1.3	U	1.3	U	1.5	U	1.3
2,6-Dimethylnaphthalene	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2
Acenaphthylene	U	1.3	U	1.3	U	1.3	U	1.5	U	1.3
Acenaphthene	U	1.3	U	1.3	U	1.3	U	1.5	U	1.3
Dibenzofuran	U	1.2	U	1.2	U	1.2	U	1.3	U	1.2
Fluorene	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2
Phenanthrene	U	1.1	U	1.1	U	1.1	U	1.3	U	1.1
Anthracene	U	1.1	U	1.1	U	1.1	U	1.3	U	1.1
Carbazole	U	1.2	U	1.2	U	1.2	U	1.3	U	1.2
Fluoranthene	U	0.96	U	0.96	U	0.96	U	1.1	U	0.96
Pyrene	U	0.96	U	0.96	U	0.96	U	1.1	U	0.96
Benzo[a]anthracene	U	0.85	U	0.85	U	0.85	U	0.99	U	0.85
Chrysene	U	0.85	U	0.85	U	0.85	U	0.99	U	0.85
Benzo[b]fluoranthene	U	0.77	U	0.77	U	0.77	U	0.89	U	0.77
Benzo[k]fluoranthene	U	0.77	U	0.77	U	0.77	U	0.89	U	0.77
Benzo[e]pyrene	U	0.77	U	0.77	U	0.77	U	0.89	U	0.77
Benzo[a]pyrene	U	0.77	U	0.77	U	0.77	U	0.89	U	0.77
Indeno(1,2,3-c,d)pyrene	U	0.70	U	0.70	U	0.70	U	0.81	U	0.70
Dibenzo[a,h]anthracene	U	0.70	U	0.70	U	0.70	U	0.81	U	0.70
Benzo[g,h,i]perylene	U	0.70	U	0.70	U	0.70	U	0.81	U	0.70

COC: 03/14/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-14-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/14/02				
Sample No.	06899		06900	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/14/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-14-02PAH.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 03/14/01

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
3/14/01	TTWS-0130	A	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0129	3A	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0128	B	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0127	C	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0126	D	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0122	E	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0125	P	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0123	S	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0124	S	1000	Air	<0.01	<0.02	<0.02
3/14/01	TTWS-0121	R	1000	Air	<0.01	<0.02	<0.02

>/# 03/14/02-TTSilica

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

NS: Not sampled

ERT 3/26/02

NIOSH 7500: Silica crystalline by XRD

FL-03-14-02silica.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/05/02

Sample No.	WG7142-1			06760			06759			06758			06757			06756			06755		
Sampling Location	Method Blank			Location A			Location 3A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.		
Volume (Liters)	0			5603			6960			7620			6630			4875			7097		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0036	U		0.0029	U		0.0026	U		0.0030	U		0.0041	U		0.0028
12378-PeCDD	U	0.0070	0.10	U		0.018	U		0.014	U		0.013	U	0.0005	0.015	U		0.021	U		0.014
123478-HxCDD	0.0050 J		0.10	U	0.0008	0.018	U		0.014	U		0.013	U		0.015	U		0.021	U		0.014
123678-HxCDD	0.0063 J		0.10	U	0.0008	0.018	U		0.014	U		0.013	U		0.015	0.0010 J		0.021	0.0010 J		0.014
123789-HxCDD	0.0075 J		0.10	U	0.0020	0.018	U		0.014	U	0.0005	0.013	U		0.015	U	0.0013	0.021	U	0.0005	0.014
1234678-HpCDD	0.0078 J		0.10	U		0.018	U		0.014	U	0.0010	0.013	U		0.015	U		0.021	U	0.0013	0.014
OCDD	0.0296 J		0.20	U		0.036	U		0.029	U		0.026	U	0.0024	0.030	U	0.0061	0.041	U		0.028
2378-TCDF	U		0.020	U		0.0036	U		0.0029	U		0.0026	U		0.0030	U		0.0041	U		0.0028
12378-PeCDF	U	0.0059	0.10	0.0013 J		0.018	U		0.014	U		0.013	U	0.0005	0.015	0.0006 J		0.021	0.0006 J		0.014
23478-PeCDF	U	0.0046	0.10	U		0.018	U		0.014	U		0.013	U		0.015	U	0.0005	0.021	U	0.0005	0.014
123478-HxCDF	U		0.10	U	0.0012	0.018	U	0.0003	0.014	0.0003 J		0.013	U	0.0003	0.015	U	0.0009	0.021	U	0.0005	0.014
123678-HxCDF	0.0052 J		0.10	0.0012 J		0.018	U	0.0003	0.014	0.0005 J		0.013	U	0.0005	0.015	U	0.0008	0.021	U	0.0007	0.014
234678-HxCDF	U	0.0031	0.10	U	0.0010	0.018	U		0.014	U		0.013	U	0.0004	0.015	U	0.0007	0.021	U	0.0006	0.014
123789-HxCDF	U	0.0055	0.10	0.0016 J		0.018	U		0.014	0.0005 J		0.013	U		0.015	U	0.0009	0.021	U	0.0004	0.014
1234678-HpCDF	U	0.0046	0.10	0.0020 J		0.018	U		0.014	U		0.013	U	0.0003	0.015	U		0.021	U		0.014
1234789-HpCDF	U	0.0055	0.10	0.0015 J		0.018	U		0.014	U		0.013	U		0.015	U		0.021	U		0.014
OCDF	U		0.20	0.0050 J		0.036	U		0.029	U		0.026	U		0.030	U		0.041	U		0.028
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			0.0011			U			U			U			U			0.0007		
Total HxCDDs	0.0189			U			U			U			U			0.0010			U		
Total HpCDDs	0.0118			0.0030			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			0.0021			U			U			0.0004			0.0006			U		
Total HxCDFs	0.0052			0.0027			U			0.0013			U			U			U		
Total HpCDFs	U			0.0036			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0025			0.0004			0.0000			0.0001			0.0000			0.0001			0.0002		
TEQ (ND=1/2)	0.0387			0.0023			0.0009			0.0009			0.0009			0.0019			0.0013		

COC# 03/05/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 3/26/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

3-05-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/05/02

Sample No.	06754			06753			06752			06751			06761			06762		
Sampling Location	Location S			Location P			Location E			R- TAGA			Field Blank			Lot Blank		
Volume (Liters)	6690			7170			7125			7004			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0030	U		0.0028	U		0.0028	U		0.0029	U		0.020	U		0.020
12378-PeCDD	U		0.015	U		0.014	U	0.0019	0.014	U	0.0026	0.014	0.0028 J		0.10	U		0.10
123478-HxCDD	U		0.015	U		0.014	0.0015 J		0.014	U	0.0022	0.014	U		0.10	U		0.10
123678-HxCDD	U		0.015	U	0.0010	0.014	0.0015 J		0.014	U	0.0025	0.014	U		0.10	U		0.10
123789-HxCDD	U		0.015	U	0.0011	0.014	U		0.014	U		0.014	0.0038 J		0.10	U		0.10
1234678-HpCDD	U		0.015	U		0.014	U		0.014	U		0.014	0.0072 J		0.10	U	0.0058	0.10
OCDD	U		0.030	U	0.0034	0.028	U		0.028	U		0.029	0.0158 J		0.20	U	0.0158	0.20
2378-TCDF	U		0.0030	U		0.0028	U		0.0028	U		0.0029	U		0.020	U		0.020
12378-PeCDF	U	0.0010	0.015	U	0.0011	0.014	0.0016 J		0.014	0.0021 J		0.014	U	0.0030	0.10	U		0.10
23478-PeCDF	U		0.015	U		0.014	U		0.014	U	0.0020	0.014	0.0026 J		0.10	U		0.10
123478-HxCDF	U	0.0008	0.015	0.0010 J		0.014	U	0.0011	0.014	0.0017 J		0.014	U		0.10	U		0.10
123678-HxCDF	0.0008 J		0.015	U	0.0010	0.014	U	0.0013	0.014	U	0.0019	0.014	U		0.10	U		0.10
234678-HxCDF	0.0007 J		0.015	U	0.0009	0.014	0.0014 J		0.014	0.0025 J		0.014	U	0.0030	0.10	U		0.10
123789-HxCDF	U	0.0011	0.015	U	0.0012	0.014	U	0.0019	0.014	0.0030 J		0.014	U		0.10	U		0.10
1234678-HpCDF	0.0012 J		0.015	0.0009 J		0.014	0.0013 J		0.014	0.0019 J		0.014	U		0.10	U		0.10
1234789-HpCDF	U	0.0009	0.015	U	0.0007	0.014	0.0012 J		0.014	0.0023 J		0.014	U	0.0040	0.10	U		0.10
OCDF	U		0.030	U		0.028	0.0019 J		0.028	U		0.029	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	0.0011			0.0010			U			U			U			U		
Total HxCDDs	U			U			0.0047			0.0037			0.0038			U		
Total HpCDDs	0.0016			0.0020			0.0026			0.0085			0.0099			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	0.0006			0.0008			0.0027			0.0021			U			U		
Total HxCDFs	0.0015			0.0010			0.0014			0.0072			U			U		
Total HpCDFs	0.0012			0.0009			0.0025			0.0042			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0001			0.0002			0.0005			0.0009			0.0032			0.0000		
TEQ (ND=1/2)	0.0020			0.0020			0.0022			0.0022			0.0399			0.0401		

COC# 03/05/02 dioxin

3-05-02dioalr.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/07/02

Sample No.	WG7146-1			06772			06771			06770			06769			06768			06767		
Sampling Location	Method Blank			Location A			Location 3A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.		
Volume (Liters)	0			7515			7485			7200			7275			6315			7305		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0027	U		0.0027	U		0.0028	U		0.0027	U		0.0032	U		0.0027
12378-PeCDD	U		0.10	U		0.013	U		0.014	U		0.014	U		0.014	U		0.016	U		0.014
123478-HxCDD	U		0.10	U		0.013	U		0.014	U		0.014	U		0.014	U		0.016	U		0.014
123678-HxCDD	U		0.10	U		0.013	U		0.014	U		0.014	U		0.014	U		0.016	U		0.014
123789-HxCDD	U		0.10	U		0.013	U		0.014	U		0.014	U		0.014	U		0.016	0.0008 J		0.014
1234678-HpCDD	U	0.0068	0.10	0.0008 J		0.013	0.0011 J		0.014	0.0011 J		0.014	U		0.014	0.0010 J		0.016	0.0009 J		0.014
OCDD	U	0.0322	0.20	0.0026 J		0.027	0.0030 J		0.027	U	0.0039	0.028	0.0034 J		0.027	U	0.0031	0.032	0.0031 J		0.027
2378-TCDF	U		0.020	U		0.0027	U		0.0027	U		0.0028	U		0.0027	U		0.0032	U		0.0027
12378-PeCDF	U	0.0028	0.10	0.0002 J		0.013	U		0.014	U	0.0003	0.014	U	0.0002	0.014	U	0.0005	0.016	U	0.0002	0.014
23478-PeCDF	0.0019 J		0.10	0.0003 J		0.013	U	0.0002	0.014	0.0002 J		0.014	U	0.0003	0.014	U	0.0003	0.016	U	0.0003	0.014
123478-HxCDF	U		0.10	U		0.013	U		0.014	U		0.014	U		0.014	0.0002 J		0.016	U		0.014
123678-HxCDF	U	0.0029	0.10	U		0.013	U		0.014	U	0.0003	0.014	U	0.0003	0.014	U	0.0004	0.016	U	0.0003	0.014
234678-HxCDF	U	0.0034	0.10	U		0.013	0.0004 J		0.014	U	0.0004	0.014	0.0003 J		0.014	U		0.016	0.0004 J		0.014
123789-HxCDF	U		0.10	U		0.013	U		0.014	U		0.014	U		0.014	U	0.0003	0.016	U		0.014
1234678-HpCDF	U		0.10	U		0.013	U		0.014	0.0006 J		0.014	U		0.014	U	0.0006	0.016	U		0.014
1234789-HpCDF	U		0.10	U		0.013	U		0.014	U	0.0006	0.014	U		0.014	U		0.016	U	0.0005	0.014
OCDF	U		0.20	U		0.027	U		0.027	0.0014 J		0.028	U		0.027	U		0.032	U		0.027
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			0.0008		
Total HpCDDs	0.0078			0.0008			0.0011			0.0011			U			0.0010			0.0009		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	0.0019			0.0005			U			0.0002			U			U			U		
Total HxCDFs	U			U			0.0004			U			0.0003			0.0002			0.0004		
Total HpCDFs	U			U			U			0.0006			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0010			0.0002			0.0001			0.0001			0.0001			0.0000			0.0001		
TEQ (ND=1/2)	0.0410			0.0007			0.0008			0.0009			0.0009			0.0009			0.0009		

COC# 03/07/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent

ERTC 3/26/02

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

3-07-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/07/02

Sample No.	06766			06765			06764			06763			06773			06774		
Sampling Location	Location S			Location P			Location E			R- TAGA			Field Blank			Lot Blank		
Volume (Liters)	7517.5			5895			6989			6463.5			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0034	U		0.0029	U		0.0031	U		0.020	U		0.020
12378-PeCDD	U	0.0003	0.013	U		0.017	0.0007 J		0.014	U	0.0009	0.015	U		0.10	U		0.10
123478-HxCDD	U		0.013	U		0.017	U		0.014	U		0.015	U		0.10	U		0.10
123678-HxCDD	U		0.013	U		0.017	U		0.014	U		0.015	U		0.10	U		0.10
123789-HxCDD	0.0008 J		0.013	U	0.0008	0.017	U		0.014	0.0010 J		0.015	U		0.10	U		0.10
1234678-HpCDD	0.0013 J		0.013	0.0013 J		0.017	U	0.0014	0.014	0.0020 J		0.015	U		0.10	U		0.10
OCDD	U	0.0028	0.027	0.0045 J		0.034	0.0036 J		0.029	0.0062 J		0.031	U		0.20	U	0.0194	0.20
2378-TCDF	U		0.0027	U		0.0034	U		0.0029	U		0.0031	U		0.020	U		0.020
12378-PeCDF	0.0006 J		0.013	0.0005 J		0.017	U	0.0005	0.014	U	0.0006	0.015	U		0.10	U		0.10
23478-PeCDF	0.0005 J		0.013	U	0.0004	0.017	U	0.0004	0.014	U	0.0004	0.015	U		0.10	U		0.10
123478-HxCDF	U	0.0005	0.013	U	0.0004	0.017	0.0005 J		0.014	U	0.0006	0.015	U		0.10	U		0.10
123678-HxCDF	U	0.0006	0.013	0.0005 J		0.017	0.0007 J		0.014	U	0.0008	0.015	U		0.10	U		0.10
234678-HxCDF	0.0004 J		0.013	U	0.0005	0.017	U	0.0005	0.014	0.0007 J		0.015	U		0.10	U		0.10
123789-HxCDF	0.0006 J		0.013	U		0.017	0.0007 J		0.014	0.0008 J		0.015	U		0.10	U		0.10
1234678-HpCDF	0.0005 J		0.013	U		0.017	U		0.014	U	0.0008	0.015	U		0.10	U		0.10
1234789-HpCDF	U		0.013	U		0.017	U		0.014	U		0.015	U		0.10	U		0.10
OCDF	0.0012 J		0.027	U		0.034	U		0.029	U		0.031	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			0.0007			U			U			U		
Total HxCDDs	0.0008			U			U			0.0010			U			U		
Total HpCDDs	0.0013			0.0013			0.0006			0.0020			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	0.0010			0.0005			U			U			U			U		
Total HxCDFs	0.0010			0.0005			0.0018			0.0015			U			U		
Total HpCDFs	0.0005			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0005			0.0001			0.0005			0.0003			0.0000			0.0000		
TEQ (ND=1/2)	0.0011			0.0010			0.0014			0.0013			0.0401			0.0401		

COC# 03/07/02 dioxin

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 03/19/01

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
3/19/01	TTWS-0142	A	1000	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0141	3A	980	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0140	B	1000	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0139	C	1000	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0137	D	1000	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0138	D	1000	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0134	E	1000	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0135	P	1000	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0136	S	980	Air	<0.01	<0.02	<0.02
3/19/01	TTWS-0133	R	980	Air	<0.01	<0.02	<0.02

:# 03/19/02-TTSilica

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

NS: Not sampled

ERT 3/26/02

NIOSH 7500: Silica crystalline by XRD

FL-03-19-01silica.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/14/02

Sample No.	06889		06890		06891		06892		06893	
Sampling Location	Location R		Location E		Location P		Location S		Location D	
Volume (L)	932.2		933.63		948		908.7		859.13	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.5	U	1.5	U	1.6	U	1.7
2-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5
1-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.4	U	1.5
Biphenyl	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
2,6-Dimethylnaphthalene	U	1.3	U	1.3	U	1.2	U	1.3	U	1.4
Acenaphthylene	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
Acenaphthene	U	1.3	U	1.3	U	1.3	U	1.3	U	1.4
Dibenzofuran	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Fluorene	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Phenanthrene	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2
Anthracene	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2
Carbazole	U	1.2	U	1.2	U	1.2	U	1.2	U	1.3
Fluoranthene	U	0.97	U	0.97	U	0.96	U	1.0	U	1.1
Pyrene	U	0.97	U	0.97	U	0.96	U	1.0	U	1.1
Benzo[a]anthracene	U	0.86	U	0.86	U	0.85	U	0.89	U	0.94
Chrysene	U	0.86	U	0.86	U	0.85	U	0.89	U	0.94
Benzo[b]fluoranthene	U	0.78	U	0.78	U	0.77	U	0.80	U	0.85
Benzo[k]fluoranthene	U	0.78	U	0.78	U	0.77	U	0.80	U	0.85
Benzo[e]pyrene	U	0.78	U	0.78	U	0.77	U	0.80	U	0.85
Benzo[a]pyrene	U	0.78	U	0.78	U	0.77	U	0.80	U	0.85
Indeno(1,2,3-c,d)pyrene	U	0.71	U	0.71	U	0.70	U	0.73	U	0.77
Dibenzo[a,h]anthracene	U	0.71	U	0.71	U	0.70	U	0.73	U	0.77
Benzo[g,h,i]perylene	U	0.71	U	0.71	U	0.70	U	0.73	U	0.77

COC: 03/14/02-PAHs ERT: 3/28/02

U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-14-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/14/02										
Sample No.	06894		06895		06896		06897		06898	
Sampling Location	Location D 948		Location C 948		Location B 948		Location 3A 816		Location A 948	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.5	U	1.5	U	1.5	U	1.8	U	1.5
2-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.6	U	1.4
1-Methylnaphthalene	U	1.4	U	1.4	U	1.4	U	1.6	U	1.4
Biphenyl	U	1.3	U	1.3	U	1.3	U	1.5	U	1.3
2,6-Dimethylnaphthalene	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2
Acenaphthylene	U	1.3	U	1.3	U	1.3	U	1.5	U	1.3
Acenaphthene	U	1.3	U	1.3	U	1.3	U	1.5	U	1.3
Dibenzofuran	U	1.2	U	1.2	U	1.2	U	1.3	U	1.2
Fluorene	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2
Phenanthrene	U	1.1	U	1.1	U	1.1	U	1.3	U	1.1
Anthracene	U	1.1	U	1.1	U	1.1	U	1.3	U	1.1
Carbazole	U	1.2	U	1.2	U	1.2	U	1.3	U	1.2
Fluoranthene	U	0.96	U	0.96	U	0.96	U	1.1	U	0.96
Pyrene	U	0.96	U	0.96	U	0.96	U	1.1	U	0.96
Benzo[a]anthracene	U	0.85	U	0.85	U	0.85	U	0.99	U	0.85
Chrysene	U	0.85	U	0.85	U	0.85	U	0.99	U	0.85
Benzo[b]fluoranthene	U	0.77	U	0.77	U	0.77	U	0.89	U	0.77
Benzo[k]fluoranthene	U	0.77	U	0.77	U	0.77	U	0.89	U	0.77
Benzo[e]pyrene	U	0.77	U	0.77	U	0.77	U	0.89	U	0.77
Benzo[a]pyrene	U	0.77	U	0.77	U	0.77	U	0.89	U	0.77
Indeno(1,2,3-c,d)pyrene	U	0.70	U	0.70	U	0.70	U	0.81	U	0.70
Dibenzo[a,h]anthracene	U	0.70	U	0.70	U	0.70	U	0.81	U	0.70
Benzo[g,h,i]perylene	U	0.70	U	0.70	U	0.70	U	0.81	U	0.70

COC: 03/14/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-14-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/14/02				
Sample No.	06899		06900	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/14/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-14-02PAH.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/12/02

Sample No.	WG7157-1			06784			06783			06782			06781			06780			06778		
Sampling Location	Method Blank			Location A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.			Location S		
Volume (Liters)	0			7571.38			7755			7830			6670			6660			7537.25		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0026	U		0.0026	NA		NA	U		0.0030	U		0.0030	U		0.0027
12378-PeCDD	U		0.10	U		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
123478-HxCDD	U		0.10	U		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
123678-HxCDD	U		0.10	U		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
123789-HxCDD	U		0.10	U		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
1234678-HpCDD	0.0040 J		0.10	U	0.0006	0.013	U	0.0006	0.013	NA		NA	U	0.0009	0.015	0.0007 J		0.015	U	0.0005	0.013
OCDD	U	0.0253	0.20	U	0.0028	0.026	U	0.0027	0.026	NA		NA	0.0051 J		0.030	U	0.0031	0.030	0.0025 J		0.027
2378-TCDF	U		0.020	U		0.0026	U		0.0026	NA		NA	U		0.0030	U		0.0030	U		0.0027
12378-PeCDF	U		0.10	U		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
23478-PeCDF	U		0.10	U		0.013	0.0002 J		0.013	NA		NA	U		0.015	U		0.015	U	0.0002	0.013
123478-HxCDF	U		0.10	0.0002 J		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
123678-HxCDF	U		0.10	U		0.013	0.0003 J		0.013	NA		NA	U		0.015	U		0.015	U		0.013
234678-HxCDF	U		0.10	U		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
123789-HxCDF	U		0.10	U		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
1234678-HpCDF	U		0.10	0.0006		0.013	0.0005 J		0.013	NA		NA	0.0006 J		0.015	U		0.015	U		0.013
1234789-HpCDF	U		0.10	U		0.013	U		0.013	NA		NA	U		0.015	U		0.015	U		0.013
OCDF	U		0.20	U		0.026	U		0.026	NA		NA	0.0013 J		0.030	U		0.030	U		0.027
Total TCDDs	U			U			U			NA			U			U			U		
Total PeCDDs	U			U			U			NA			U			U			U		
Total HxCDDs	U			U			U			NA			U			U			U		
Total HpCDDs	0.0040			U			U			NA			U			0.0007			U		
Total TCDFs	U			U			U			NA			U			U			U		
Total PeCDFs	U			U			0.0002			NA			U			U			U		
Total HxCDFs	U			0.0002			0.0003			NA			U			U			U		
Total HpCDFs	U			U			0.0005			NA			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0002			NA			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0401			0.0007			0.0007			NA			0.0008			0.0007			0.0007		

COC# 03/12/02 dioxin

B= Not detected due to blank contamination

EMPC: Estimated Maximum Possible Concentration

TEQ: Toxicity Equivalent

NA Not Analyzed . Sample not received by the laboratory

The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

ERTC 3/28/02

3-12-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/12/02

Sample No.	06777			06776			06775			06785			06786			WG7157-1C			06779		
Sampling Location	Location P			Location E			R- TAGA			Field Blank			Lot Blank			Method Blank			D Greenwich & Albany St.		
Volume (Liters)	6244.88			6675			7500			0			0			0			7119.5		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.0032	U		0.0030	U		0.0027	U		0.020	U		0.020	U		0.020	U		0.0028
12378-PeCDD	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
123478-HxCDD	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
123678-HxCDD	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
123789-HxCDD	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
1234678-HpCDD	U		0.016	U		0.015	U		0.013	U		0.10	0.0004 J		0.10	U	0.0052	0.10	U		0.014
OCDD	0.0029 J		0.032	0.0016 J		0.030	0.0016 J		0.027	U		0.20	U		0.20	0.0238 J		0.20	U	0.0041	0.028
2378-TCDF	U		0.0032	U		0.0030	U		0.0027	U		0.020	U		0.020	U		0.020	U		0.0028
12378-PeCDF	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
23478-PeCDF	U		0.016	U		0.015	U		0.013	U	0.0015	0.10	U	0.0014	0.10	U		0.10	U		0.014
123478-HxCDF	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
123678-HxCDF	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
234678-HxCDF	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
123789-HxCDF	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
1234678-HpCDF	U		0.016	0.0002 J		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
1234789-HpCDF	U		0.016	U		0.015	U		0.013	U		0.10	U		0.10	U		0.10	U		0.014
OCDF	U		0.032	U		0.030	U		0.027	U		0.20	U		0.20	U		0.20	U		0.028
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			0.0004			U			U		
Total HpCDDs	U			U			U			U			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			0.0002			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0008			0.0007			0.0007			0.0401			0.0401			0.0406			0.0015		

COC# 03/12/02 dioxin

3-12-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/14/02

Sample No.	WG7160-1			06796			06795			06793			06792			06791			06789		
Sampling Location	Method Blank			Location A			Location 3A			C-Liberty St. & Church St.			D Greenwich & Albany St.			D Greenwich & Albany St.			Location P		
Volume (Liters)	0			5775			7005			7620			7085			7163			7455		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0035	U		0.0029	U		0.0027	U		0.0028	U		0.0028	U		0.0027
12378-PeCDD	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
123478-HxCDD	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
123678-HxCDD	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
123789-HxCDD	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
1234678-HpCDD	U		0.10	U		0.017	0.0009 J		0.014	U	0.0007	0.013	U		0.014	U	0.0009	0.014	U	0.0012	0.013
OCDD	U	0.0129	0.20	U		0.035	U	0.0043	0.029	U		0.027	U		0.028	U		0.028	U	0.0041	0.027
2378-TCDF	U		0.020	U		0.0035	U		0.0029	U		0.0027	U		0.0028	U		0.0028	U		0.0027
12378-PeCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
23478-PeCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
123478-HxCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
123678-HxCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
234678-HxCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
123789-HxCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
1234678-HpCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
1234789-HpCDF	U		0.10	U		0.017	U		0.014	U		0.013	U		0.014	U		0.014	U		0.013
OCDF	U		0.20	U		0.035	U		0.029	U		0.027	U		0.028	U		0.028	U		0.027
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	U			U			0.0009			U			U			U			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0414			0.0015			0.0016			0.0014			0.0016			0.0016			0.0015		

COC# 03/14/02 dioxin

B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent
NA Not Analyzed , Sample not received by the laboratory
The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

ERTC 3/29/02

3-14-02dioair.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/14/02

Sample No.	06788			06787			06798			WG7160-1C			06794			06790			06797		
Sampling Location	Location E			R- TAGA			Lot Blank			Method Blank			B-Church & Dey St.			Location S			Field Blank		
Volume (Liters)	7410			6780			0			0			7620			7500			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0030	U		0.020	U		0.020	U		0.0026	U		0.0027	U		0.020
12378-PeCDD	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
123478-HxCDD	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
123678-HxCDD	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
123789-HxCDD	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
1234678-HpCDD	U		0.013	0.0026 J		0.015	U		0.10	U	0.0041	0.10	U	0.0006	0.013	0.0006 J		0.013	U	0.0031	0.10
OCDD	U	0.0046	0.027	U		0.030	U	0.0134	0.20	U	0.0148	0.20	U		0.026	U		0.027	0.0121 J		0.20
2378-TCDF	U		0.0027	U		0.0030	U		0.020	U		0.020	U		0.0026	U		0.0027	U		0.020
12378-PeCDF	U		0.013	U		0.015	U		0.10	U	0.0009	0.10	U		0.013	U		0.013	U		0.10
23478-PeCDF	U		0.013	U		0.015	U		0.10	U	0.0014	0.10	U		0.013	U		0.013	U	0.0015	0.10
123478-HxCDF	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
123678-HxCDF	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
234678-HxCDF	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
123789-HxCDF	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
1234678-HpCDF	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U	0.0002	0.013	U		0.10
1234789-HpCDF	U		0.013	U		0.015	U		0.10	U		0.10	U		0.013	U		0.013	U		0.10
OCDF	U		0.027	U		0.030	U		0.20	U		0.20	U		0.026	U		0.027	U		0.20
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			0.0018			U			U			U			U			U		
Total HpCDDs	U			0.0050			U			U			U			0.0006			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0016			0.0021			0.0401			0.0401			0.0005			0.0006			0.0401		

COC# 03/14/02 dioxin

3-14-02dioair.xls

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06624		06624		06624		06623		06613		06614	
Location		Lot Blank 1		Lot Blank 2		Lot Blank 3		Field Blank		Location R		Location A	
Air Volume (L)								0		6423.5		4469	
Date Collected		01/31/02		01/31/02		01/31/02		01/31/02		01/31/02		01/31/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.60	U	0.60	U	0.60	U	0.60	U	0.093	U	0.13
Antimony	AA-Fur	U	0.075	U	0.075	U	0.075	U J	0.075	U J	0.012	U J	0.017
Arsenic	AA-Fur	U	0.032	U	0.032	U	0.032	U	0.032	U	0.005	U	0.007
Barium	ICAP	U	0.32	U	0.32	U	0.32	U	0.32	U	0.049	U	0.070
Beryllium	ICAP	U	0.050	U	0.050	U	0.050	U	0.050	U	0.008	U	0.011
Cadmium	ICAP	U	0.016	U	0.016	U	0.016	U	0.016	U	0.003	U	0.004
Calcium	ICAP	3.7	3.5	U	3.5	U	3.5	U	3.5	0.99 J	0.54	3.6 J	0.78
Chromium	ICAP	0.53	0.042	0.88	0.042	0.68	0.042	0.39	0.042	U	0.007	U	0.009
Cobalt	ICAP	U	0.034	0.054	0.034	U	0.034	U	0.034	U	0.005	0.015	0.007
Copper	ICAP	U	0.44	U	0.44	U	0.44	U	0.44	U	0.069	U	0.099
Iron	ICAP	U	0.90	U	0.90	U	0.90	U	0.90	0.62 J	0.14	2.6 J	0.20
Lead	AA-Fur	U	0.010	U	0.010	U	0.010	U	0.010	0.009	0.002	0.029	0.002
Magnesium	ICAP	U	3.3	U	3.3	U	3.3	U	3.3	U	0.52	U	0.74
Manganese	ICAP	U	0.078	U	0.078	U	0.078	U J	0.078	U J	0.012	U J	0.017
Nickel	ICAP	U	0.058	0.076	0.058	U	0.058	U J	0.058	U J	0.009	U J	0.013
Potassium	ICAP	11	3.7	13	3.7	8.0	3.7	U J	3.7	U J	0.57	U J	0.82
Selenium	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	U	0.012	U	0.017
Silver	ICAP	0.37	0.025	0.52	0.025	0.17	0.025	0.084	0.025	U	0.004	U	0.006
Sodium	ICAP	U	3.7	U	3.7	U	3.7	U R	3.7	U R	0.57	U R	0.82
Thallium	AA-Fur	U	0.035	U	0.035	U	0.035	U J	0.035	U J	0.005	U J	0.008
Vanadium	ICAP	U	0.037	U	0.037	U	0.037	U	0.037	U	0.006	U	0.008
Zinc	ICAP	U	0.079	U	0.079	U	0.079	U J	0.079	0.067 J	0.012	U J	0.018

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

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Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06615		06616		06618		06619		06620		06621	
Location		Location 3A		LOC B CHURCH & DEY ST		D-GREENWICH & ALBANY ST.		S-RECTOR PLACE & SOUTH END AVE		P-ALBANY ST. & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		4980		3920		3192		3680		4046.25		3140	
Date Collected		01/31/02		01/31/02		01/31/02		01/31/02		01/31/02		01/31/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.12	U	0.15	U	0.19	U	0.16	1.9 J	0.15	U	0.19
Antimony	AA-Fur	U J	0.015	U J	0.019	U J	0.023	U J	0.020	U J	0.019	U J	0.024
Arsenic	AA-Fur	U	0.006	U	0.008	U	0.010	U	0.009	U	0.008	U	0.010
Barium	ICAP	U	0.063	U	0.080	U	0.099	U	0.086	U	0.078	U	0.10
Beryllium	ICAP	U	0.010	U	0.013	U	0.016	U	0.014	U	0.012	U	0.016
Cadmium	ICAP	U	0.003	U	0.004	U	0.005	U	0.004	U	0.004	U	0.005
Calcium	ICAP	1.9 J	0.70	4.1 J	0.89	3.6 J	1.1	3.1 J	0.95	8.5 J	0.86	4.2 J	1.1
Chromium	ICAP	U	0.008	U	0.011	U	0.013	U	0.250	U	0.010	U	0.013
Cobalt	ICAP	U	0.007	U	0.009	U	0.011	U	0.009	U	0.008	U	0.011
Copper	ICAP	U	0.089	U	0.11	U	0.14	U	0.12	U	0.11	U	0.14
Iron	ICAP	1.5 J	0.18	3.2 J	0.23	5.4 J	0.28	1.5 J	0.24	5.7 J	0.22	2.7 J	0.29
Lead	AA-Fur	0.022	0.002	0.030	0.003	0.029	0.003	0.025	0.003	0.068	0.003	0.037	0.003
Magnesium	ICAP	U	0.67	U	0.85	U	1.0	U	0.90	2.7	0.82	U	1.1
Manganese	ICAP	U J	0.016	U J	0.020	U J	0.025	U J	0.021	U J	0.020	U J	0.025
Nickel	ICAP	U J	0.012	U J	0.015	U J	0.018	U J	0.016	U J	0.014	U J	0.019
Potassium	ICAP	U J	0.74	1.9 J	0.94	U J	1.2	0.58 J	1.0	U J	0.91	U J	1.2
Selenium	ICAP	U	0.015	U	0.019	U	0.023	U	0.020	U	0.019	U	0.024
Silver	ICAP	U	0.005	U	0.006	U	0.008	U	0.007	U	0.006	U	0.008
Sodium	ICAP	U R	0.74	U R	0.94	U R	1.2	U R	1.0	U R	0.91	U R	1.2
Thallium	AA-Fur	U J	0.007	U J	0.009	U J	0.011	U J	0.010	U	0.009	U J	0.011
Vanadium	ICAP	U	0.007	U	0.009	U	0.012	U	0.010	U	0.009	U	0.012
Zinc	ICAP	U J	0.016	U J	0.020	U J	0.025	U J	0.021	U J	0.020	U J	0.025

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID	06622
Location	E-LIBERTY ST. & SOUTH END AVE
Air Volume (L)	3750
Date Collected	01/31/02

Parameter	Analysis Method	Conc µg/m³		MDL µg/m³
Aluminum	ICAP	U		0.16
Antimony	AA-Fur	U	J	0.020
Arsenic	AA-Fur	U		0.009
Barium	ICAP	U		0.084
Beryllium	ICAP	U		0.013
Cadmium	ICAP	U		0.004
Calcium	ICAP	2.5	J	0.93
Chromium	ICAP	U		0.011
Cobalt	ICAP	U		0.009
Copper	ICAP	U		0.12
Iron	ICAP	2.1	J	0.24
Lead	AA-Fur	0.13		0.003
Magnesium	ICAP	U		0.88
Manganese	ICAP	U		0.021
Nickel	ICAP	U		0.016
Potassium	ICAP	U	J	1.0
Selenium	AA-Fur	U	J	0.020
Silver	ICAP	U		0.008
Sodium	ICAP	U	R	0.98
Thallium	AA-Fur	U	J	0.009
Vanadium	ICAP	U		0.010
Zinc	ICAP	U	J	0.021

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 2, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D089	1	964	08:02	10	00:00:30	1	0.0	0.1	18.1	117.1
3	-74.198685	40.570054	D075	1	964	08:02	10	00:00:30	1	0.0	0.1	17.91	69.5
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D074	1	950	07:55	10	00:00:30	1	0.0	0.1	20.2	79.3
6	-74.207406	40.563818	D088	1	952	07:56	10	----	----	----	0.1	15.8	----
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D065	1	475	07:55	10	00:01:00	1	0.0	0.1	16.7	52.3

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
March 29, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D089	1	960	08:00	10	00:00:30	1	0.0	0.1	31.5	207.1
3	-74.198685	40.570054	D075	1	960	08:00	10	00:00:30	1	0.0	0.1	32.7	84.6
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D074	1	960	08:00	10	00:00:30	1	0.0	0.1	35.5	152.5
6	-74.207406	40.563818	D088	1	978	08:09	10	00:00:30	1	0.0	0.1	31.7	715.3
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	2621	1	----	----	10	00:00:10	1	0.0	0.1	----	----

*Note: DataRam at perimeter location 8 had a system fault and logged no data. I contacted the company and they will send a replacement DataRam on Monday.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 1, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D089	1	1082	09:01	10	00:00:30	1	0.0	0.1	18.1	185.1
3	-74.198685	40.570054	D075	1	1084	09:02	10	00:00:30	1	0.0	0.1	15.1	119.7
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D074	1	----	----	10	00:00:30	1	0.0	0.1	----	----
6	-74.207406	40.563818	----	1	----	----	10	----	----	----	0.1	----	----
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	D088	1	1103	11:05	10	00:00:30	1	0.0	0.1	13.1	93.5

*Note: DataRams at perimeter location 5 & 6 did not run due to equipment failure. I contacted the company and they will send replacement DataRams today.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
March 28, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	-74.198262	40.566883	D089	1	970	08:05	10	00:00:30	1	0.0	0.1	18.8	237.5
3	-74.198685	40.570054	D075	1	970	08:05	10	00:00:30	1	0.0	0.1	19.6	350.9
4	-74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	-74.205873	40.568892	D074	1	962	08:01	10	00:00:30	1	0.0	0.1	9.5	46.5
6	-74.207406	40.563818	D088	1	960	08:00	10	00:00:30	1	0.0	0.1	9.7	164.1
7	-74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	-74.203019	40.561915	2621	1	2864	07:57	10	00:00:10	1	0.0	0.1	12.1	114.4

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 1, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0647	0652	0634
Stop Time	1436	1440	1425
Run Time (minutes)	469	468	471
Maximum Concentration (ug/m^3)	58.31	60.28	77.25
Average Concentration (ug/m^3)	21.08	18.64	18.85

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 28, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0701	0705	0648
Stop Time	1456	1501	1444
Run Time (minutes)	475	476	476
Maximum Concentration (ug/m^3)	46.28	51.57	52.19
Average Concentration (ug/m^3)	17.14	12.58	19.24

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 29, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0644	0648	0632
Stop Time	1447	1453	1435
Run Time (minutes)	483	485	483
Maximum Concentration (ug/m^3)	102.01	281.13	64.63
Average Concentration (ug/m^3)	41.54	33.63	34.29

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 30, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0644	0647	0631
Stop Time	1359	1357	1351
Run Time (minutes)	435	430	440
Maximum Concentration (ug/m^3)	163.06	227.42	94.72
Average Concentration (ug/m^3)	64.46	57.38	59.62

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: March 27, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0704	0709	0651
Stop Time	1506	1510	1453
Run Time (minutes)	482	481	482
Maximum Concentration (ug/m^3)	41.72	55.62	65.21
Average Concentration (ug/m^3)	11.41	10.67	14.09

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/03/02

File Name	NYC1446	NYC1447	NYC1448	NYC1449	NYC1451	NYC1450
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07675	A07676	A07677	A07678
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	30	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/28/02

File Name	NYC1397	NYC1398	NYC1399	NYC1400	NYC1402	NYC1401
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07651	A07653	A07652	A07654
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichlroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/29/02

File Name	NYC1405	NYC1406	NYC1407	NYC1408	NYC1410	NYC1409
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07655	A07656	A07657	A07658
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/30/02

File Name	NYC1413	NYC1414	NYC1415	NYC1416	NYC1418	NYC1417
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07659	A07660	A07661	A07662
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**110**	**26**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	**49**	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/31/02

File Name	NYC1421	NYC1422	NYC1423	NYC1424	NYC1426	NYC1425
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07663	A07664	A07665	A07666
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-1* MODIFIED METHOD
DRAFT GC/MS Results for 04/01/02

File Name	NYC1429	NYC1430	NYC1431	NYC1432	NYC1434	NYC1433
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07667	A07668	A07669	A07670
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	160	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/02/02

File Name	NYC1437	NYC1438	NYC1439	NYC1440	NYC1442	NYC1441
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07671	A07672	A07673	A07674
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 03/27/02

File Name	NYC1389	NYC1390	NYC1391	NYC1392	NYC1394	NYC1393
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07647	A07648	A07649	A07650
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	**21**
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	**52**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	**44**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	**29**
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, April 4, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 12:30 p.m. on April 5

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 141 samples taken in and around ground zero from March 25 through March 29. EPA also sampled for asbestos at two additional Lower Manhattan locations from March 16 through March 19, and from March 21 through March 23. All but one sample showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

One sample, taken on March 29 at Location "W" (Wash Tent Common Area) showed 96 structures per square millimeter. This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,612, with 19 samples above the standard (11 of these were collected prior to September 30; the other seven were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9 and March 29).

Air Sampling for Particulates - EPA collected samples on April 2 and April 3 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for Dioxin - A total of 39 samples were collected on March 5, 7, 12, and 14, at various locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Staten Island Landfill:

Air Sampling for Asbestos - A total of 19 samples were collected on March 28. All samples showed results less than the AHERA standard.

Air Monitoring for Particulates - There were no significant readings from samples collected on April 3.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected from March 16 through March 19, and from March 21 through March 23, at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island). Samples were also collected on March 20 at P.S. 154 and P.S. 99. None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, April 4, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 24 PM)

Results pending.

NYC / ER (Mar 25, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 25, PM)

Results pending.

NYC / ER (Mar 26, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 26, 1200 - 2400 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
1 sample (Location U) was not collected due to an equipment malfunction.
1 sample (Location D) was not collected due to a wet filter.

NYC / ER (Mar 27, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 27, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location L) was not collected due to tampering.

NYC / ER (Mar 28, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 28, 1200 - 2359 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Mar 29 AM)

Results pending.

NYC / ER (Mar 29, 1200 - 2359 hrs)

1 of 18 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location W (96.00 S/mm^2).

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 24)

Results pending.

Fresh Kills (Mar 28, 0801 - 2239 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Apr 3) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 16 - 23) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 51 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.
5 samples (Sites 1, 2, 6, 7, and 8) from March 20 were not collected due to equipment malfunctions.

NYC / ER (Apr 2) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 24.60 ug/m^3 with a maximum reading of 270.59 ug/m^3.
Station N had an average of 21.41 ug/m^3 with a maximum reading of 51.34 ug/m^3.
Station R had an average of 23.49 ug/m^3 with a maximum reading of 88.84 ug/m^3.

NYC / ER (Apr 3) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 40.39 ug/m^3 with a maximum reading of 97.15 ug/m^3.
Station N had an average of 28.59 ug/m^3 with a maximum reading of 70.32 ug/m^3.
Station R had an average of 32.12 ug/m^3 with a maximum reading of 65.30 ug/m^3.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/26/02 0001 to 1200

Data Validation Date: 03/29/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/26/02	FB032602	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/26/02	TB032602	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/26/02	TTW-01899	W	1440	Air	8.92	0.002	***1	0	16	0.0043
03/26/02	TTW-01900	Q	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01901	E	1404	Air	<7.0	<0.002	0	0	<16	<0.0044
03/26/02	TTW-01902	S	1476	Air	<7.0	<0.002	0	0	<16	<0.0042
03/26/02	TTW-01903	U	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01904	V	1368	Air	<7.0	<0.002	0	0	<16	<0.0045
03/26/02	TTW-01905	K	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01906	D	1404	Air	<7.0	<0.002	0	0	<16	<0.0044
03/26/02	TTW-01907	C	1260	Air	<7.0	<0.002	0	0	<16	<0.0049
03/26/02	TTW-01908	C-Dup	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01909	B	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01910	A	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01911	A-Dup	1440	Air	<7.0	<0.002	***1	0	16	0.0043
03/26/02	TTW-01912	F	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01913	J	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01914	N	1476	Air	<7.0	<0.002	0	0	<16	<0.0042
03/26/02	TTW-01915	M1	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01916	L	1440	Air	<7.0	<0.002	0	0	<16	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-26-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/29/02**
Sampling Date and Time: 3/26/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/26/02	TTW-01918	Q	1368	Air	<7.0	<0.002	0	0	<16	<0.0045
03/26/02	TTW-01919	E	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01920	S	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01922	V	1404	Air	<7.0	<0.002	0	0	<16	<0.0044
03/26/02	TTW-01923	V-Dup	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01924	K	1368	Air	10.83	0.003	0	0	<16	<0.0045
03/26/02	TTW-01926	C	1135.7	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/26/02	TTW-01927	B	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01928	A	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01929	F	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01930	J	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/26/02	TTW-01931	N	1476	Air	<7.0	<0.002	0	0	<16	<0.0042
03/26/02	TTW-01932	M1	1512	Air	<7.0	<0.002	0	0	<16	<0.0041
03/26/02	TTW-01933	L	1332	Air	<7.0	<0.002	0	0	<16	<0.0046
03/26/02	TTW-01934	L-Dup	1476	Air	<7.0	<0.002	0	0	<16	<0.0042
03/26/02	TTW-01917	W	1368	Air	<7.0	<0.002	0	0	<16	<0.0045

No Sample Submitted for Location U due to pump fault
No Sample Submitted for Location D due to rain getting into sample filter

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/29/2002**
Sampling Date and Time: 3/27/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
03/27/02	FB032702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/27/02	TB032702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/27/02	TTW-01935	W	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/27/02	TTW-01936	Q	1404	Air	<7.0	<0.002	0	0	<16	<0.0044
03/27/02	TTW-01937	E	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/27/02	TTW-01938	S	1476	Air	<7.0	<0.002	0	0	<16	<0.0042
03/27/02	TTW-01939	U	1404	Air	<7.0	<0.002	0	0	<16	<0.0044
03/27/02	TTW-01940	V	1512	Air	<7.0	<0.002	0	0	<16	<0.0041
03/27/02	TTW-01941	K	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/27/02	TTW-01942	D	1415.4	Air	<7.0	<0.002	0	0	<16	<0.0044
03/27/02	TTW-01943	C	1368	Air	<7.0	<0.002	0	0	<16	<0.0045
03/27/02	TTW-01944	B	1512	Air	<7.0	<0.002	0	0	<16	<0.0041
03/27/02	TTW-01945	B-Dup	1440	Air	<7.0	<0.002	***1	0	16	0.0043
03/27/02	TTW-01946	A	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/27/02	TTW-01947	F	1262.8	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/27/02	TTW-01948	F-Dup	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/27/02	TTW-01949	J	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/27/02	TTW-01950	N	1512	Air	<7.0	<0.002	0	0	<16	<0.0041
03/27/02	TTW-01951	M1	1440	Air	<7.0	<0.002	0	0	<16	<0.0043
03/27/02	TTW-01952	L	1440	Air	<7.0	<0.002	0	0	<16	<0.0043

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-27-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/02/2002**
Sampling Date and Time: 3/25/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/25/02	FB032502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/25/02	TB032502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/25/02	TTW-01863	W	1476	Air	10.19	0.003	***1	0	16.00	0.0042
03/25/02	TTW-01864	Q	1428	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01865	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01866	S	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/25/02	TTW-01867	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01868	V	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/25/02	TTW-01869	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01870	D	1404	Air	7.64	0.002	0	0	<16.00	<0.0044
03/25/02	TTW-01871	D-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01872	C	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/25/02	TTW-01873	B	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/25/02	TTW-01874	B-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01875	A	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/25/02	TTW-01876	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01877	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01878	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01879	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/25/02	TTW-01880	L	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-25-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/27/02 1200 to 2400

Data Validation Date: 04/01/02

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
03/27/02	TTW-01953	W	1404	Air	12.74	0.003	0	***1	16.00	0.0044
03/27/02	TTW-01954	Q	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/27/02	TTW-01955	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/27/02	TTW-01956	E-Dup	1584	Air	<7.0	<0.002	0	0	<20.00	<0.0049
03/27/02	TTW-01957	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/27/02	TTW-01958	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/27/02	TTW-01959	V	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/27/02	TTW-01960	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/27/02	TTW-01961	K-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/27/02	TTW-01962	D	1368	Air	<7.0	<0.002	****1	0	16.00	0.0045
03/27/02	TTW-01963	C	1440	Air	14.65	0.004	0	0	<16.00	<0.0043
03/27/02	TTW-01964	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/27/02	TTW-01965	A	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/27/02	TTW-01966	F	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
03/27/02	TTW-01967	J	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/27/02	TTW-01968	N	1440	Air	<7.0	<0.002	***1	0	16.00	0.0043
03/27/02	TTW-01969	M1	1548	Air	<7.0	<0.002	0	0	<16.00	<0.0040

N0 Sample Submitted for Location L due to the pump being tampered with

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/01/2002**
Sampling Date and Time: **3/28/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/28/02	FB032802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/28/02	TB032802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/28/02	TTW-01971	W	1476	Air	<7.0	<0.002	***1	0	16.00	0.0042
03/28/02	TTW-01972	Q	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/28/02	TTW-01973	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01974	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01975	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/28/02	TTW-01976	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01977	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01978	D	1476	Air	<7.0	<0.002	***1	0	16.00	0.0042
03/28/02	TTW-01979	C	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01980	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01981	A	1476	Air	<7.0	<0.002	***2	0	32.00	0.0083
03/28/02	TTW-01982	A-Dup	1064	Air	<7.0	<0.003	0	0	<11.43	<0.0041
03/28/02	TTW-01983	F	1278	Air	<7.0	<0.002	0	0	<13.33	<0.0040
03/28/02	TTW-01984	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01985	J-Dup	1584	Air	<7.0	<0.002	0	0	<16.00	<0.0039
03/28/02	TTW-01986	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/28/02	TTW-01987	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01988	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-28-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/29/02 1200 to 2359

Data Validation Date: 04/02/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/29/02	TTW-02025	W	1440	Air	<7.0	<0.002	***4	***2	96.00	0.0257
03/29/02	TTW-02026	Q	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/29/02	TTW-02027	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02028	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/29/02	TTW-02029	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02030	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02031	K	1440	Air	<7.0	<0.002	***1	0	16.00	0.0043
03/29/02	TTW-02032	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02033	C	1404	Air	11.46	0.003	0	0	<16.00	<0.0044
03/29/02	TTW-02034	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02035	A	1476	Air	7.01	0.002	***1	0	16.00	0.0042
03/29/02	TTW-02036	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02037	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02038	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/29/02	TTW-02039	N-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02040	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02041	M1-Dup	1324	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/29/02	TTW-02042	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-29-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/02/02**
Sampling Date and Time: **3/28/02 1200 to 2359**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/28/02	TTW-01989	W	1368	Air	31.85	0.009	0	0	<16.00	<0.0045
03/28/02	TTW-01990	Q	1440	Air	8.92	0.002	***1	0	16.00	0.0043
03/28/02	TTW-01991	Q-Dup	1440	Air	12.1	0.003	0	0	<16.00	<0.0043
03/28/02	TTW-01992	E	1476	Air	7.64	0.002	0	0	<16.00	<0.0042
03/28/02	TTW-01993	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01994	U	634	Air	12.74	0.008	0	0	<8.00	<0.0049
03/28/02	TTW-01995	V	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/28/02	TTW-01996	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01997	D	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
03/28/02	TTW-01998	D-Dup	1296	Air	7.64	0.002	0	0	<16.00	<0.0048
03/28/02	TTW-01999	C	1440	Air	15.29	0.004	0	0	<16.00	<0.0043
03/28/02	TTW-02000	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/28/02	TTW-02001	A	1440	Air	<7.0	<0.002	0	***1 *****1	32.00	0.0086
03/28/02	TTW-02002	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-02003	J	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/28/02	TTW-02004	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-02005	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	TTW-02006	L	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044

Sampling Locations:
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D: East end of Albany St. at Greenwich St.
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-28-02-pm.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/28/02 0801 to 2239

Data Validation Date: 04/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/28/02	LF03716	P-1	1218.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
03/28/02	LF03717	P-2	1139.40	Air	<7.0	<0.002	0	0	<13.12	<0.0044
01/00/00	LF03718	P-3	1283.40	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/28/02	LF03719	P-4	1155.60	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/28/02	LF03720	P-5	1290.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/28/02	LF03721	P-6	1134.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/28/02	LF03722	P-7	1280.60	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/28/02	LF03723	P-8	1236.60	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/28/02	LF03724	W-12A	1225.80	Air	33.12	0.010	0	0	<13.12	<0.0041
03/28/02	LF03725	W-12B	1161.10	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/28/02	LF03726	B-13	1152.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/28/02	LF03727	B-14	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/28/02	LF03728	T-15	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/28/02	LF03729	T-16	1404.00	Air	28.03	0.008	0	0	<15.75	<0.0043
03/28/02	LF03730	O-17	1229.30	Air	<7.0	<0.002	0	0	<13.12	<0.0041
03/28/02	LF03731	O-18	1177.75	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/28/02	LF03732	O-19	1166.40	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/28/02	LF03733	MPHS-20	1251.25	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/28/02	LF03734	P-1 Dup	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
03/28/02	LF03735	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/28/02	LF03736	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-28-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 04/02/02**
Sampling Date and Time: 3/21/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S-f/cc**
03/21/02	7093-18-0175	Park Row	1204	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/21/02	7093-19-0175	Chambers Street	1346	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/21/02	7093-15-0173	I.S. 143 Manhattan	1292	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/21/02	7094-09-0163	P.S. 154 (Bronx)	1372	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/21/02	7096-12-0169	P.S. 199 (Queens)	1388	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/21/02	7095-98-0169	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/21/02	7097-18-0166	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
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**** Chrysotile
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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-03-21-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/22/02 1200 to 2400

Data Validation Date: 4/1/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/22/02	7093-18-0176	Park Row	1314	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/22/02	7093-19-0176	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	7093-15-0174	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	7094-09-0164	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	7096-12-0170	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/22/02	7095-98-0170	P.S. 274 (Brooklyn)	1274	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/22/02	7097-18-0167	P.S. 44 (S I)	1700	Air	<7.0	<0.002	0	0	<16.00	<0.0036

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/1/02**
Sampling Date and Time: **3/23/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
03/23/02	7093-18-0177	Park Row	1262	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/23/02	7093-19-0177	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	7093-15-0175	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	7094-09-0165	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	7096-12-0171	P.S. 199 (Queens)	1258	Air	<7.0	<0.002	***1	0	16.00	0.0049
03/23/02	7095-98-0171	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/23/02	7097-18-0168	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-03-23-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/17/02 1200 to 2400

Data Validation Date: 3/28/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/17/02	7093-18-0171	Park Row	1166	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/17/02	7093-19-0171	Chambers Street	1388	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/17/02	7093-15-0169	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	7094-09-0159	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	7096-12-0165	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/17/02	7095-98-0165	P.S. 274 (Brooklyn)	1366	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/17/02	7097-18-0162	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

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**** Chrysotile
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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/18/02 1200 to 2400

Data Validation Date: 3/28/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/18/02	7093-18-0172	Park Row	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/18/02	7093-19-0172	Chambers Street	1182	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/18/02	7093-15-0170	I.S. 143 Manhattan	1252	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/18/02	7094-09-0160	P.S. 154 (Bronx)	1020	Air	<7.0	<0.003	0	0	<13.33	<0.0050
03/18/02	7096-12-0166	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/18/02	7095-98-0166	P.S. 274 (Brooklyn)	1242	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/18/02	7097-18-0163	P.S. 44 (S I)	1028	Air	<7.0	<0.003	0	0	<11.43	<0.0043

Key:

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-03-18-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/20/02 1200 to 2117

Data Validation Date: 3/30/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/20/02	7094-09-0162	P.S. 154 (Bronx)	306	Air	<7.0	<0.009	0	0	<8.00	<0.0101
03/20/02	7096-12-0168	P.S. 199 (Queens)	1114	Air	<7.0	<0.002	0	0	<13.33	<0.0048

Key:

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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/30/02**
Sampling Date and Time: 3/16/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/16/02	7093-18-0170	Park Row	1214	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/16/02	7093-19-0170	Chambers Street	1292	Air	8.28	0.002	0	0	<16.00	<0.0048
03/16/02	7093-15-0168	I.S. 143 Manhattan	1110	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/16/02	7094-09-0158	P.S. 154 (Bronx)	1288	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/16/02	7096-12-0164	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	7095-98-0164	P.S. 274 (Brooklyn)	1436	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/16/02	7097-18-0161	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 3/30/02**
Sampling Date and Time: 3/19/02 1200 to 2400

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/19/02	7093-18-0173	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/19/02	7093-19-0173	Chambers Street	1260	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/19/02	7093-15-0171	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/19/02	7094-09-0161	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/19/02	7096-12-0167	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/19/02	7095-98-0167	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/19/02	7097-18-0164	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

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United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 3, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0644	0649	0632
Stop Time	1441	1447	1429
Run Time (minutes)	477	478	477
Maximum Concentration (ug/m^3)	97.15	70.32	65.30
Average Concentration (ug/m^3)	40.39	28.59	32.12

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 2, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0646	0650	0634
Stop Time	1440	1448	1435
Run Time (minutes)	474	478	479
Maximum Concentration (ug/m^3)	270.59	51.34	88.84
Average Concentration (ug/m^3)	24.60	21.41	23.49

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 3, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	694	05:47	10	00:00:30	1	0.0	0.1	36.4	181.8
3	74.198685	40.570054	D075	1	694	05:47	10	00:00:30	1	0.0	0.1	29.9	104.8
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	690	05:45	10	00:00:30	1	0.0	0.1	24.6	241.6
6	74.207406	40.563818	D065	1	690	05:45	10	----	----	----	0.1	23.8	107.3
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D088	1	345	05:45	10	00:01:00	1	0.0	0.1	25.8	143.5

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday-Monday, April 5-8, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:30 p.m. on April 8

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 102 samples taken in and around ground zero on March 25, and from March 29 through April 1. EPA also sampled for asbestos at two additional Lower Manhattan locations on March 24 and 25, and on March 27 and 28. All but one sample showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

One sample, taken on March 30 at Location "W" (Wash Tent Common Area) showed 96 structures per square millimeter. This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,722, with 20 samples above the standard (11 of these were collected prior to September 30; the other nine were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9, March 29 and March 30).

Air Sampling for Particulates - EPA collected samples on April 4 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). Samples were also collected on April 5 at Locations "N" and "R." All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted from April 4 through April 6 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from April 4 through April 6 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 19 samples were collected on March 30. All samples showed results less than the AHERA standard.

Air Monitoring for Particulates - There were no significant readings from samples collected on April 4 and 6.

Dust Sampling for Asbestos - Asbestos was not detected in any of the 6 samples collected on March 25.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on March 24 and 25, and on March 27 and 28, at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn), P.S. 199 (3290 48th St., Queens), and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, April 8, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 24 PM)

Results pending.

NYC / ER (Mar 25, 0823 hrs - Mar 26, 0812 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location V) was not collected due to an equipment malfunction.
Note: except for one sample (Location B) this sampling period represents the evening hours of March 25.

NYC / ER (Mar 29, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location U- duplicate) was not collected due to tampering.

NYC / ER (Mar 30, 0001 - 1200 hrs)

1 of 17 samples analyzed was above the TEM AHERA standard.
1 sample (Location M1) was not collected due to an equipment malfunction.
Exceedance of the TEM AHERA standard occurred at Location W (96.00 S/mm^2).

NYC / ER (Mar 30, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location Q) was not collected due to an equipment malfunction.

NYC / ER (Mar 31 AM)

Results pending.

NYC / ER (Mar 31, 1200 hrs - Apr 1, 0720 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
Note: except for one sample (Location W) this sampling period represents the evening hours of March 31.

NYC / ER (Apr 1, 0001 - 1200 hrs)

All 16 samples analyzed were below the TEM AHERA standard.
2 samples (Location V and J-duplicate) were not collected due to equipment malfunctions.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 24)

Results pending.

Fresh Kills (Mar 29)

Results pending.

Fresh Kills (Mar 30, 0720 - 2130 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 31)

Sampling was not conducted at the landfill on this day.

Fresh Kills (Apr 4) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Apr 6) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-5, P-6, and P-8) based on daily average concentrations.
Particulate measurements were not taken at P-3 due to an equipment malfunction.

Ambient Air Sampling Locations

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 24 - 25) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 26) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 27 - 28) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 13 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 4) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 5.21 ug/m^3 with a maximum reading of 51.39 ug/m^3.
Station N had an average of 4.55 ug/m^3 with a maximum reading of 33.93 ug/m^3.
Station R had an average of 6.80 ug/m^3 with a maximum reading of 16.21 ug/m^3.

NYC / ER (Apr 5) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations N and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Particulate measurements were not taken at Location L due to an equipment malfunction.
Station N had an average of 7.08 ug/m^3 with a maximum reading of 59.83 ug/m^3.
Station R had an average of 9.63 ug/m^3 with a maximum reading of 17.96 ug/m^3.

NYC / ER (Apr 4) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 5) - Volatile Organics (Mobile Laboratory)

Aside from two compounds detected at one location (North Tower), no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 6) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Bulk Sampling

Fresh Kills (Mar 25) - Asbestos

6 bulk samples collected from the landfill sift and active bank areas, and the barge unloading areas.
Asbestos was not detected in any of the samples.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/01/02**
Sampling Date and Time: **3/25/02 0823 to 3/26/2002 0812**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/25/02	TTW-01881	W	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01882	Q	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/25/02	TTW-01883	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01884	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01885	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01886	U-Dup	1300	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/25/02	TTW-01888	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01889	D	1440	Air	<7.0	<0.002	***1	0	16.00	0.0043
03/25/02	TTW-01890	C	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/25/02	TTW-01891	B	2858	Air	<7.0	<0.001	0	0	<20.00	<0.0027
03/25/02	TTW-01892	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01893	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01894	J	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/25/02	TTW-01895	N	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/25/02	TTW-01896	M1	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/25/02	TTW-01897	M1-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	TTW-01898	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample was submitted for Location V due to pump malfunction
Please note the sample for Location B was started at 0823 and ran for almost a full 24 hours (23hrs 49 mins)

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/02/2002**
Sampling Date and Time: **3/29/02 0001 to 1200**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
03/29/02	FB032902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/29/02	TB032902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/29/02	TTW-02007	W	1404	Air	34.39	0.009	***1	***1	32.00	0.0088
03/29/02	TTW-02008	Q	1548	Air	<7.0	<0.002	0	0	<16.00	<0.0040
03/29/02	TTW-02009	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02010	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02011	S-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02012	U	1382	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/29/02	TTW-02014	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02015	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02016	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02017	C	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/29/02	TTW-02018	B	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02019	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02020	F	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/29/02	TTW-02021	J	1476	Air	9.55	0.002	***1	0	16.00	0.0042
03/29/02	TTW-02022	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02023	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	TTW-02024	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample taken for Location U-Dup due to pump being tampered with.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-29-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/30/02 0001 to 1200

Data Validation Date: 04/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/30/02	FB033002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/30/02	TB033002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/30/02	TTW-02043	W	1440	Air	8.92	0.002	***5	***1	96	0.0257
03/30/02	TTW-02044	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02045	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02046	S	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/30/02	TTW-02047	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02048	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02049	V-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02050	K	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/30/02	TTW-02051	K- Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02052	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02053	C	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/30/02	TTW-02054	B	1548	Air	<7.0	<0.002	0	0	<16.00	<0.0040
03/30/02	TTW-02055	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02056	F	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/30/02	TTW-02057	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02058	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02060	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample taken for Location M1 due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-30-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/03/02**
Sampling Date and Time: **3/30/02 1200 to 2400**

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5µ - 5µ	TEM (AHERA) Structures (#) 5µ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
03/30/02	TTW-02061	W	1476	Air	<7.0	<0.002	***3	0	48.00	0.0125
03/30/02	TTW-02063	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02064	E-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02065	S	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/30/02	TTW-02066	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02067	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02068	K	1170	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/30/02	TTW-02069	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02070	C	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/30/02	TTW-02071	B	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02072	B-Dup	1440	Air	<7.0	<0.002	***2	0	32.00	0.0086
03/30/02	TTW-02073	A	1440	Air	<7.0	<0.002	***1	0	16.00	0.0043
03/30/02	TTW-02074	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02075	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	TTW-02076	N	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/30/02	TTW-02077	M1	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/30/02	TTW-02078	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample submitted for Location Q due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-30-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/31/02 1200 to 04/01/2002 0720

Data Validation Date: 04/04/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/31/02	TTW-02097	W	2320	Air	7.64	0.001	0	0	<20.00	<0.0033
03/31/02	TTW-02098	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02099	Q-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02100	E	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/31/02	TTW-02101	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/31/02	TTW-02102	S-Dup	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/31/02	TTW-02103	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02104	V	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/31/02	TTW-02105	K	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/31/02	TTW-02106	D	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/31/02	TTW-02107	C	1404	Air	7.64	0.002	0	0	<16.00	<0.0044
03/31/02	TTW-02108	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02109	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02110	F	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/31/02	TTW-02111	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02112	N	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/31/02	TTW-02113	M1	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
03/31/02	TTW-02114	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Please note that Sample for Location W ran 19 1/2 hours.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-03-31-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/04/2002**
Sampling Date and Time: **4/1/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/01/02	FB040102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/01/02	TB040102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/01/02	TTW-02115	Q	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/01/02	TTW-02116	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02117	E-Dup	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
04/01/02	TTW-02118	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02119	U	1228.5	Air	<7.0	<0.002	0	0	<13.33	<0.0042
04/01/02	TTW-02121	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02122	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02123	C	1368	Air	7.64	0.002	0	0	<16.00	<0.0045
04/01/02	TTW-02124	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02125	A	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/01/02	TTW-02126	F	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/01/02	TTW-02127	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02129	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02130	M1	1352	Air	<7.0	<0.002	0	0	<16.00	<0.0046
04/01/02	TTW-02131	L	1376	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/01/02	TTW-02132	W	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044

No Sample submitted for Location V and location J-Dup due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct).
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-01-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/30/02 0720 to 2130

Data Validation Date: 04/04/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/30/02	LF03758	P-1	1116.00	Air	<7.0	<0.002	0	***1	13.12	0.0045
03/30/02	LF03759	P-2	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
03/30/02	LF03760	P-3	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/30/02	LF03761	P-3 Dup	1296.00	Air	7.64	0.002	***1	0	15.75	0.0047
03/30/02	LF03762	P-4	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/30/02	LF03763	P-5	1123.20	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/30/02	LF03764	P-6	1247.40	Air	<7.0	<0.002	0	0	<15.75	<0.0049
03/30/02	LF03765	P-7	1283.40	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/30/02	LF03766	P-8	1103.30	Air	11.46	0.004	0	0	<13.12	<0.0046
03/30/02	LF03767	W-12A	1296.00	Air	28.03	0.008	***1	0	15.75	0.0047
03/30/02	LF03768	W-12B	869.40	Air	<7.0	<0.003	0	0	<11.25	<0.0050
03/30/02	LF03769	B-13	1198.80	Air	7.64	0.002	0	0	<13.12	<0.0042
03/30/02	LF03770	B-14	1200.60	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/30/02	LF03771	T-15	1296.00	Air	8.92	0.003	0	0	<15.75	<0.0047
03/30/02	LF03772	T-16	1224.00	Air	59.87	0.019	***1	0	15.75	0.0050
03/30/02	LF03773	O-17	1130.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/30/02	LF03774	O-18	32.40	Air	<7.0	<0.083	0	0	<7.87	<0.0936
03/30/02	LF03775	O-19	1222.20	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/30/02	LF03776	MPHS-20	1368.00	Air	7.64	0.002	0	0	<15.75	<0.0044
03/30/02	LF03777	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/30/02	LF03778	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-30-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/3/02**
Sampling Date and Time: **3/24/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/24/02	7093-18-0178	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	7093-19-0178	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	7093-15-0176	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	7094-09-0166	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	7096-12-0172	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	7095-98-0172	P.S. 274 (Brooklyn)	1142	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/24/02	7097-18-0169	P.S. 44 (S I)	1272	Air	<7.0	<0.002	0	0	<16.00	<0.0048

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/3/02**
Sampling Date and Time: 3/25/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/25/02	7093-18-0179	Park Row	1310	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/25/02	7093-19-0179	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	7093-15-0177	I.S. 143 Manhattan	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/25/02	7094-09-0167	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	7096-12-0173	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	7095-98-0173	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/25/02	7097-18-0170	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/27/02 1200 to 2400

Data Validation Date: 4/5/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/27/02	7093-18-0181	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/27/02	7093-19-0181	Chambers Street	1180	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/27/02	7093-15-0179	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/27/02	7096-12-0175	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/27/02	7095-98-0175	P.S. 274 (Brooklyn)	1358	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/27/02	7097-18-0172	P.S. 44 (S I)	1342	Air	<7.0	<0.002	0	0	<16.00	<0.0046

No Sample submitted for Location P.S. 154 due to "No Access". Sample was not able to be collected

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-03-27-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/5/02**
Sampling Date and Time: 3/28/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/28/02	7093-18-0182	Park Row	1188	Air	<7.0	<0.002	0	0	<13.33	<0.0043
03/28/02	7093-19-0182	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	7093-15-0180	I.S. 143 Manhattan	1250	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/27/02	7094-09-0169	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	7096-12-0176	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/28/02	7095-98-0176	P.S. 274 (Brooklyn)	1136	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/28/02	7097-18-0173	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sample # 7094-09-0169 was sampled on March 27th, however was included in this package due to the fact that it was not accessible on the March 28th collection

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

ext-03-28-02.xls

NYC Response
Asbestos Bulk Sampling Results for WTC Landfill
Sampling Date : 3/25/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
03/25/02	0616	B-14	Soil	None	10.0% Min.Wool	75.00% Non-Fibrous
					15.0% Cellulose	(Other)
03/25/02	0617	B-14	Soil	None	10.0% Min.Wool	80.00% Non-Fibrous
					10.0% Cellulose	(Other)
03/25/02	0618	B-13	Soil	None	5.0% Min.Wool	80.00% Non-Fibrous
					15.0% Cellulose	(Other)
03/25/02	0619	B-13	Soil	None	10.0% Min.Wool	80.00% Non-Fibrous
					10.0% Cellulose	(Other)
03/25/02	0620	Sifter # 2	Soil	None	10.0% Min.Wool	75.00% Non-Fibrous
					15.0% Cellulose	(Other)
03/25/02	0621	South Active Bank	Soil	None	10.0% Min.Wool	75.00% Non-Fibrous
					15.0% Cellulose	(Other)

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 4, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	900	07:30	10	00:00:30	1	0.0	0.1	13.7	244.9
3	74.198685	40.570054	D075	1	906	07:33	10	00:00:30	1	0.0	0.1	11.1	933.0
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	912	07:36	10	00:00:30	1	0.0	0.1	8.1	896.4
6	74.207406	40.563818	D088	1	920	07:40	10	00:00:30	1	0.0	0.1	16.5	1517.0
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D065	1	928	07:44	10	00:00:30	1	0.0	0.1	12.3	838.4

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 6, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D088	1	960	08:00	10	00:00:30	1	0.0	0.1	28.3	632.0
3	74.198685	40.570054	D074	1	----	----	10	00:00:30	1	0.0	0.1	----	----
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D075	1	942	07:51	10	00:00:30	1	0.0	0.1	13.9	446.2
6	74.207406	40.563818	D065	1	940	07:50	10	00:00:30	1	0.0	0.1	9.0	589.1
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D089	1	941	07:51	10	00:00:30	1	0.0	0.1	24.6	519.6

***Note: Due to instrument malfunction no data was logged at perimeter location 3.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 4, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0640	0645	0628
Stop Time	1446	1450	1434
Run Time (minutes)	486	485	486
Maximum Concentration (ug/m^3)	51.39	33.93	16.21
Average Concentration (ug/m^3)	5.21	4.55	6.80

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 5, 2002

Location	L*	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	-	2.0	2.0
Start Time	-	0641	0624
Stop Time	-	1436	1420
Run Time (minutes)	-	475	476
Maximum Concentration (ug/m^3)	-	59.83	17.96
Average Concentration (ug/m^3)	-	7.08	9.63

* equipment malfunction

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/05/02

File Name	NYC1474	NYC1475	NYC1476	NYC1477	NYC1479	NYC1478
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07687	A07688	A07689	A07690
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichlorpropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/05/02

File Name	NYC1466	NYC1467	NYC1468	NYC1469	NYC1471	NYC1470
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower	South Tower
Sample Number			A07683	A07684	A07685	A07686
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	**43**	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	**41**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Tuesday, April 9, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 3:45 p.m. on April 9

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 17 samples taken in and around ground zero on March 31. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,739, with 20 samples above the standard (11 of these were collected prior to September 30; the other nine were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9, March 29 and March 30).

Air Sampling for Particulates - EPA collected samples on April 6 and April 8 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted on April 7 and April 8 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on April 7 and April 8 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOC's, or the levels of VOC's did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 19 samples were collected on March 29. All samples showed results less than the AHERA standard.

Air Monitoring for Particulates - There were no significant readings from samples collected on April 8.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, April 9, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 24 PM)

Results pending.

NYC / ER (Mar 31, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location Q) was not collected due to an equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 24)

Results pending.

Fresh Kills (Mar 29, 0735 - 2045 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Apr 8) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 26) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 6) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA. Instruments operated approximately 8 hours.
Station L had an average of 10.94 ug/m^3 with a maximum reading of 107.10 ug/m^3.
Station N had an average of 9.32 ug/m^3 with a maximum reading of 101.00 ug/m^3.
Station R had an average of 12.48 ug/m^3 with a maximum reading of 938.79 ug/m^3.

NYC / ER (Apr 8) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA. Instruments operated approximately 8 hours.
Station L had an average of 44.27 ug/m^3 with a maximum reading of 429.42 ug/m^3.
Station N had an average of 28.69 ug/m^3 with a maximum reading of 52.81 ug/m^3.
Station R had an average of 33.92 ug/m^3 with a maximum reading of 174.03 ug/m^3.

NYC / ER (Apr 7) - Volatile Organics (Mobile Laboratory)

Aside from one compound detected at one location (South Tower), no other volatile organic compounds were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 8) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/29/02 0735 to 2045

Data Validation Date: 04/02/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/29/02	LF03737	P-1	1164.60	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/29/02	LF03738	P-2	1069.30	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/29/02	LF03739	P-3	1209.60	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/29/02	LF03740	P-4	1198.80	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/29/02	LF03741	P-5	1222.20	Air	<7.0	<0.002	0	0	<13.12	<0.0041
03/29/02	LF03742	P-6	1193.40	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/29/02	LF03743	P-7	1183.20	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/29/02	LF03744	P-8	1276.20	Air	<7.0	<0.002	0	0	<13.12	<0.0040
03/29/02	LF03745	W-12A	1358.50	Air	<7.0	<0.002	0	*****2	31.5	0.0089
03/29/02	LF03746	W-12B	1112.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/29/02	LF03747	B-13	1224.00	Air	<7.0	<0.002	0	***1	13.12	0.0041
03/29/02	LF03748	B-14	1193.40	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/29/02	LF03749	T-15	1296.00	Air	<7.0	<0.002	***1	0	13.12	0.0039
03/29/02	LF03750	T-16	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
03/29/02	LF03751	O-17	1113.70	Air	<7.0	<0.002	***1	0	13.12	0.0045
03/29/02	LF03752	O-18	1053.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
03/29/02	LF03753	O-19	1024.20	Air	<7.0	<0.003	0	0	<11.25	<0.0042
03/29/02	LF03754	MPHS-20	1235.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
03/29/02	LF03755	P-2 Dup	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
03/29/02	LF03756	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/29/02	LF03757	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-03-29-02 rev1.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 3/31/02 0001 to 1200

Data Validation Date: 04/04/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/31/02	FB033102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/31/02	TB033102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/31/02	TTW-02079	W	1404	Air	<7.0	<0.002	***2	*****1	48	0.0132
03/31/02	TTW-02081	E	1380	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/31/02	TTW-02082	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02083	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02084	V	1350	Air	<7.0	<0.002	0	0	<16.00	<0.0046
03/31/02	TTW-02085	K	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/31/02	TTW-02086	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02087	C	1287	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/31/02	TTW-02088	B	1244.5	Air	<7.0	<0.002	0	0	<13.33	<0.0041
03/31/02	TTW-02089	A	1300	Air	<7.0	<0.002	0	0	<16.00	<0.0047
03/31/02	TTW-02090	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02091	F-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02092	J	1206.5	Air	7.01	0.002	0	0	<13.33	<0.0043
03/31/02	TTW-02093	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02094	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02095	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	TTW-02096	L-Dup	1216	Air	<7.0	<0.002	0	0	<16.00	<0.0051

No Sample Submitted for Location Q due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 8, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	567	04:44	10	00:00:30	1	0.0	0.1	49.3	492.8
3	74.198685	40.570054	D075	1	565	04:43	10	00:00:30	1	0.0	0.1	41.2	1847.2
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	565	04:43	10	00:00:30	1	0.0	0.1	28.0	191.5
6	74.207406	40.563818	D065	1	566	04:43	10	00:00:30	1	0.0	0.1	31.9	406.5
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D088	1	564	04:42	10	00:00:30	1	0.0	0.1	25.2	181.9

Note: Due to afternoon showers DataRams did not run for the full shift.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 8, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0644	0650	0631
Stop Time	1449	1451	1436
Run Time (minutes)	485	481	485
Maximum Concentration (ug/m^3)	429.42	52.81	174.03
Average Concentration (ug/m^3)	44.27	28.69	33.92

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 6, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0629	0640	0623
Stop Time	1430	1441	1424
Run Time (minutes)	481	481	481
Maximum Concentration (ug/m^3)	107.10	101.00	938.79
Average Concentration (ug/m^3)	10.94	9.32	12.48

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/08/02

File Name	NYC1490	NYC1491	NYC1492	NYC1493	NYC1495	NYC1494
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower	South Tower
Sample Number			A07695	A07696	A07697	A07698
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/07/02

File Name	NYC1482	NYC1483	NYC1484	NYC1485	NYC1487	NYC1486
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A007691	A007692	A007693	A007694
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	73
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, April 10, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 3:45 p.m. on April 10

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 67 samples taken in and around ground zero on March 24, April 1 and April 2. All but one sample showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

One sample, taken on April 2 at Location "W" (Wash Tent Common Area) showed 80 structures per square millimeter, which exceeds the AHERA standard. This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,806, with 21 samples above the standard (11 of these were collected prior to September 30; the other 10 were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9, March 29, March 30 and April 2).

Air Sampling for Particulates - EPA collected samples on April 9 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for Metals - Ten samples were collected on February 5 at various locations in Lower Manhattan. One sample, collected at Location "A" (northeast corner of West Broadway and Barclay Street), showed 0.048 micrograms per cubic meter (ug/m^3) of arsenic, which nominally exceeds EPA's Removal Action level guideline of 0.041 ug/m^3, based on a 30-year exposure. However, the sample was below the EPA Removal Action level guideline adjusted to 1-year exposure, as well as the NIOSH REL (2 ug/m^3), and the OSHA PEL (10 ug/m^3). Metals in all other samples were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted on April 9 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are

snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on April 9 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas showed no detectable levels of VOC's.

Staten Island Landfill:

Air Monitoring for Particulates - There were no significant readings from samples collected on April 5 and April 9.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, April 10, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9 AM)

Results pending.

NYC / ER (Mar 24, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 1, 1200 - 2400 hrs)

All 14 samples analyzed were below the TEM AHERA standard.
4 samples (Locations U, V, V-duplicate, and D) were not collected due to equipment malfunctions.

NYC / ER (Apr 2, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location S) was not collected since the cassette was stolen.

NYC / ER (Apr 2, 1200 - 2400 hrs)

1 of 18 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location W (80 S/mm^2).

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 24)

Results pending.

Fresh Kills (Apr 5) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-3, P-6, and P-8) based on daily average concentrations.
Particulate measurements at P-5 were not reportable due to an equipment malfunction.

Fresh Kills (Apr 8) - Particulate Monitoring (Dataram)

Resubmittal: Incorrect logging period was previously presented for Location P-8.
No change in results at the five stations (P-2, P-3, P-5, P-6, and P-8).

Fresh Kills (Apr 9) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Feb 5) - Metals

10 samples collected.
Arsenic nominally exceeded the EPA Removal Action level guidelines (based on a 30-year exposure) at Location A. Note: RAL for arsenic is 0.041 ug/m^3.
The arsenic concentration at Location A was below the EPA Removal Action level guidelines adjusted to 1-year exposure, the NIOSH REL (2 ug/m^3), and the OSHA PEL (10 ug/m^3).
All other metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 26) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 9) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 25.97 ug/m^3 with a maximum reading of 227.01 ug/m^3.
Station N had an average of 25.35 ug/m^3 with a maximum reading of 73.99 ug/m^3.
Station R had an average of 26.93 ug/m^3 with a maximum reading of 46.12 ug/m^3.

NYC / ER (Apr 9) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/09/02**
Sampling Date and Time: 3/24/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/24/02	TTW-01845	W	1440	Air	<7.0	<0.002	NA (1)	NA (1)	NA (1)	NA (1)
03/24/02	TTW-01846	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01847	E	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/24/02	TTW-01848	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/24/02	TTW-01849	S-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01850	U	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01851	V	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/24/02	TTW-01852	K	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/24/02	TTW-01853	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01854	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01855	B	1476	Air	7.64	0.002	***1	0	16.00	0.0042
03/24/02	TTW-01856	A	1416	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/24/02	TTW-01857	F	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
03/24/02	TTW-01858	F-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01859	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01860	N	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/24/02	TTW-01861	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/24/02	TTW-01862	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-24-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/06/02**
Sampling Date and Time: **4/1/02 1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
04/01/02	TTW-02133	W	1476	Air	15.29	0.004	0	0	<16.00	<0.0042
04/01/02	TTW-02134	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02135	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02136	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/01/02	TTW-02140	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02142	C	1440	Air	NA(1)	NA(1)	0	0	<16.00	<0.0043
04/01/02	TTW-02143	B	390	Air	<7.0	<0.007	0	0	<8.00	<0.0079
04/01/02	TTW-02144	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02145	A-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02146	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02147	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02148	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	TTW-02149	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/01/02	TTW-02150	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample Submitted for Location U, V, V-Dup, and D due to pump malfunction

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (filters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/07/2002**
Sampling Date and Time: **4/2/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/02/02	FB040202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/02/02	TB040202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/02/02	TTW-02151	W	1440	Air	10.19	0.003	***1 ******1	0	32	0.0086
04/02/02	TTW-02152	Q	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/02/02	TTW-02153	E	1175.85	Air	<7.0	<0.002	0	0	<13.33	<0.0044
04/02/02	TTW-02155	S-Dup	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
04/02/02	TTW-02156	U	1375.55	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/02/02	TTW-02157	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02158	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02159	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02160	C	1404	Air	NA(1)	NA(1)	0	0	<16.00	<0.0044
04/02/02	TTW-02161	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/02/02	TTW-02162	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02163	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02164	J	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/02/02	TTW-02165	N	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/02/02	TTW-02166	N-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02167	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/02/02	TTW-02168	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample submitted for Location S due to cassette missing

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
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M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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P: NE corner of South End Ave. & Albany
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R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-02-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/06/02**
Sampling Date and Time: **4/2/02 1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/02/02	TTW-02169	W	1440	Air	10.83	0.003	***5	0	80	0.0214
04/02/02	TTW-02170	Q	1368	Air	7.64	0.002	0	0	<16.00	<0.0045
04/02/02	TTW-02171	E	1134	Air	<7.0	<0.002	0	0	<13.33	<0.0045
04/02/02	TTW-02172	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02173	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/02/02	TTW-02174	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02175	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02176	K-Dup	1328	Air	<7.0	<0.002	0	0	<16.00	<0.0046
04/02/02	TTW-02177	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02178	C	1512	Air	9.55	0.002	0	0	<16.00	<0.0041
04/02/02	TTW-02179	B	1512	Air	10.19	0.003	0	0	<16.00	<0.0041
04/02/02	TTW-02180	A	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02181	F	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/02/02	TTW-02182	F-Dup	1182	Air	<7.0	<0.002	0	0	<13.33	<0.0043
04/02/02	TTW-02183	J	1088	Air	<7.0	<0.002	0	0	<13.33	<0.0047
04/02/02	TTW-02184	N	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/02/02	TTW-02185	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	TTW-02186	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

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Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		08532		08532		08532		08531		08521		08522	
Location		Lot Blank 1		Lot Blank 2		Lot Blank 3		Field Blank		Location R		Location A	
Air Volume (L)								0		3620		3771.5	
Date Collected		02/05/02		02/05/02		02/05/02		02/05/02		02/05/02		02/05/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.60	U	0.60	U	0.60	U	0.60	0.45	0.17	3.8	0.16
Antimony	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	U	0.021	U	0.020
Arsenic	AA-Fur	U	0.033	U	0.033	U	0.033	U	0.033	U	0.009	0.048 J	0.009
Barium	ICAP	U	0.32	U	0.32	U	0.32	U	0.32	U	0.087	U	0.084
Beryllium	ICAP	U	0.050	U	0.050	U	0.050	U	0.050	U	0.014	U	0.013
Cadmium	ICAP	U	0.016	U	0.016	U	0.016	U	0.016	U	0.004	U	0.004
Calcium	ICAP	3.6	3.5	U	3.5	3.9	3.5	U	3.5	U	0.97	27	0.93
Chromium	ICAP	0.74	0.042	0.73	0.042	0.97	0.042	0.012	0.042	0.026	0.012	0.067	0.011
Cobalt	ICAP	U	0.034	U	0.034	U	0.034	U	0.034	U	0.009	0.009	0.009
Copper	ICAP	U	0.44	U	0.44	U	0.44	U J	0.44	U J	0.12	U J	0.12
Iron	ICAP	U	0.90	0.92	0.90	U	0.90	U	0.90	0.85 J	0.23	8.1 J	0.24
Lead	AA-Fur	U	0.010	0.11	0.010	U	0.010	U J	0.010	U J	0.003	0.14 J	0.003
Magnesium	ICAP	U	3.3	U	3.3	U	3.3	U	3.3	U	0.92	5.3	0.87
Manganese	ICAP	U	0.078	U	0.078	U	0.078	U	0.078	U	0.022	0.18	0.021
Nickel	ICAP	U	0.058	U	0.058	U	0.058	U	0.058	U	0.016	U	0.015
Potassium	ICAP	11	3.7	U	3.7	U	3.7	U	3.7	U	1.0	U	0.97
Selenium	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	U	0.021	U	0.020
Silver	ICAP	U	0.025	U	0.025	U	0.025	U J	0.025	U J	0.007	U J	0.007
Sodium	ICAP	U	3.7	U	3.7	U	3.7	8.5 J	3.7	U J	1.0	U J	0.98
Thallium	AA-Fur	U	0.035	U	0.035	U	0.035	U	0.035	U	0.010	U	0.009
Vanadium	ICAP	U	0.037	U	0.037	U	0.037	U	0.037	U	0.010	U	0.010
Zinc	ICAP	U	0.079	U	0.079	U	0.079	U J	0.079	U J	0.022	U J	0.021

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		08523		08524		08525		08526		08527		08528	
Location		Location 3A		LOC B CHURCH & DEY ST		C-LIBERTY & CHURCH ST.		D-GREENWICH & ALBANY ST.		S-RECTOR PLACE& SOUTH END AVE		S-RECTOR PLACE& SOUTH END AVE	
Air Volume (L)		4550.5		3800		4208.5		4030		2925		1935	
Date Collected		02/05/02		02/05/02		02/05/02		02/05/02		02/05/02		02/05/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.9	0.13	2.2	0.16	3.7	0.14	0.83	0.15	0.41	0.21	0.33	0.31
Antimony	AA-Fur	U	0.016	U	0.020	U	0.018	U	0.019	U	0.026	U	0.039
Arsenic	AA-Fur	U	0.007	U	0.009	U	0.008	U	0.008	U	0.011	U	0.017
Barium	ICAP	U	0.069	U	0.083	U	0.075	U	0.078	U	0.11	U	0.16
Beryllium	ICAP	U	0.011	U	0.013	U	0.012	U	0.012	U	0.017	U	0.026
Cadmium	ICAP	U	0.004	U	0.004	U	0.004	U	0.004	U	0.006	U	0.008
Calcium	ICAP	19	0.77	19	0.92	31	0.83	6.9	0.87	U	1.2	U	1.8
Chromium	ICAP	0.021	0.009	U	0.011	U	0.056	0.028	0.010	0.028	0.014	0.086	0.021
Cobalt	ICAP	0.008	0.001	0.009	0.008	0.012	0.008	U	0.008	U	0.012	U	0.017
Copper	ICAP	0.1 J	0.019	U J	0.12	U J	0.11	U J	0.11	U J	0.15	U J	0.23
Iron	ICAP	4.4 J	0.038	4.4 J	0.24	8.1 J	0.21	2.9 J	0.22	0.72 J	0.31	0.54 J	0.47
Lead	AA-Fur	0.062 J	0.002	0.030 J	0.003	0.058 J	0.002	0.016 J	0.002	U J	0.003	U J	0.005
Magnesium	ICAP	2.8	0.14	3.9	0.87	6.2	0.78	1.0	0.82	U	1.1	U	1.7
Manganese	ICAP	0.11	0.003	0.084	0.021	0.15	0.019	0.037	0.019	U	0.026	U	0.040
Nickel	ICAP	U	0.013	U	0.015	U	0.014	U	0.014	U	0.020	U	0.031
Potassium	ICAP	U	0.81	U	0.97	U	0.87	U	0.91	U	1.3	U	1.9
Selenium	ICAP	U	0.016	U	0.020	U	0.018	U	0.019	U	0.026	U	0.039
Silver	ICAP	U J	0.005	U J	0.007	U J	0.006	0.008 J	0.006	0.014 J	0.009	U J	0.013
Sodium	ICAP	U J	0.81	15 J	0.97	19 J	0.87	U J	0.91	U J	1.3	U J	1.9
Thallium	AA-Fur	U	0.008	U	0.009	U	0.008	U	0.009	U	0.012	U	0.018
Vanadium	ICAP	U	0.009	U	0.011	U	0.009	U	0.009	U	0.013	U	0.019
Zinc	ICAP	U J	0.017	U J	0.021	U J	0.019	U J	0.020	U J	0.027	U J	0.041

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		08529		08530	
Location		P-ALBANY ST. & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		2926		1461.25	
Date Collected		02/05/02		02/05/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.7	0.21	1.8	0.41
Antimony	AA-Fur	U	0.026	U	0.051
Arsenic	AA-Fur	U	0.011	U	0.022
Barium	ICAP	U	0.11	U	0.22
Beryllium	ICAP	U	0.017	U	0.034
Cadmium	ICAP	U	0.006	U	0.011
Calcium	ICAP	11	1.2	6.6	2.4
Chromium	ICAP	0.023	0.014	U	0.029
Cobalt	ICAP	U	0.012	U	0.023
Copper	ICAP	U J	0.15	U J	0.30
Iron	ICAP	5.4 J	0.31	4.3 J	0.62
Lead	AA-Fur	0.050 J	0.003	U J	0.007
Magnesium	ICAP	3.1	1.1	U	2.3
Manganese	ICAP	0.070	0.027	0.062	0.053
Nickel	ICAP	U	0.020	U	0.040
Potassium	ICAP	U	1.3	U	2.5
Selenium	AA-Fur	U	0.026	U	0.051
Silver	ICAP	U J	0.009	U J	0.017
Sodium	ICAP	51 J	1.3	U J	2.50
Thallium	AA-Fur	U	0.012	U	0.024
Vanadium	ICAP	U	0.013	U	0.025
Zinc	ICAP	U J	0.027	U J	0.054

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 5, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	916	07:38	10	00:00:30	1	0.0	0.1	25.5	560.7
3	74.198685	40.570054	D075	1	914	07:37	10	00:00:30	1	0.0	0.1	1.2	412.7
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	----	------	10	00:00:30	1	0.0	0.1	----	----
6	74.207406	40.563818	D088	1	900	07:30	10	00:00:30	1	0.0	0.1	9.5	429.2
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D065	1	903	07:32	10	00:00:30	1	0.0	0.1	0.96	385.5

Note: DataRam D074 located at perimeter location 5 malfunctioned. Logged data was invalid and therefore is not reportable.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 9, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	939	07:50	10	00:00:30	1	0.0	0.1	132.52	3048.7
3	74.198685	40.570054	D075	1	938	07:49	10	00:00:30	1	0.0	0.1	54.3	959.5
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	936	07:48	10	00:00:30	1	0.0	0.1	17.2	1255.7
6	74.207406	40.563818	D065	1	937	07:49	10	00:00:30	1	0.0	0.1	21.8	777.3
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D088	1	936	07:48	10	00:00:30	1	0.0	0.1	7.3	3851.5

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 8, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	567	04:44	10	00:00:30	1	0.0	0.1	49.3	192.8
3	74.198685	40.570054	D075	1	565	04:43	10	00:00:30	1	0.0	0.1	41.2	1847.2
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	565	04:43	10	00:00:30	1	0.0	0.1	28.0	191.5
6	74.207406	40.563818	D065	1	566	04:43	10	00:00:30	1	0.0	0.1	31.9	406.5
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D088	1	564	04:42	10	00:00:30	1	0.0	0.1	25.2	181.9

Note: Due to afternoon showers DataRams did not run for the full shift.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 9, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0618	0621	0616
Stop Time	1429	1427	1431
Run Time (minutes)	491	486	495
Maximum Concentration (ug/m^3)	227.01	73.99	46.12
Average Concentration (ug/m^3)	25.97	25.35	26.93

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/09/02

File Name	NYC1498	NYC1499	NYC1500	NYC1501	NYC1503	NYC1502
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07699	A07700	A07701	A07702
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RI	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S Environmental Protection Agency (EPA)
Daily Summary
Thursday, April 11, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 11:00 a.m. on April 12

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 123 samples taken in and around ground zero on March 9, and from April 3 through April 6. EPA also sampled for asbestos at two additional lower Manhattan locations from March 29 through April 2. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 7,939, with 21 samples above the standard (11 of these were collected prior to September 30; the other 10 were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9, March 29, March 30 and April 2).

Air Sampling for Particulates - EPA collected samples on April 10 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for Dioxin - A total of 20 samples were collected on March 19 and March 21 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Air Sampling for Silicates - A total of 30 samples were collected on March 21, March 26, and March 28 at several locations in Lower Manhattan. Silicates were wither not detected, or were below the NIOSH Recommended Exposure Limit (REL) time-weighted average of 0.05 mg/m^3.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted on April 10 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are

snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on April 10 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas showed no detectable levels of VOC's.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 113 samples were collected on March 24, and from April1 through April 5. A sample taken on April 3 at a barge loading area (Location "B-14") showed 91.86 structures per square millimeter, which exceeds the AHERA school re-entry standard. All other samples were below the school re-entry standard.

Air Monitoring for Particulates - There were no significant readings from samples collected on April 10.

Air Sampling for Metals - A total of 10 samples were collected on March 15 and March 21 Metals in all samples were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on March 26, and from March 29 through April 2 at Intermediate School 143 (511 W. 182nd St., Manhattan) and Public School 199 (3290 48th St., Queens). Samples were also collected on March 26, March 29, April 1, and April 2 at P.S. 154 (333 East 135th St., Bronx). Samples were also collected from March 29 through April 2 at P.S. 274 (800 Bushwick Ave, Brooklyn) and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, April 11, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Mar 9, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 3, 0001 - 1200 hrs)

Results pending.

NYC / ER (Apr 3, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location F) was not collected due to an equipment malfunction.

NYC / ER (Apr 4, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location C) was not collected due to an equipment malfunction.

NYC / ER (Apr 4, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 5, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 5, 1200 hrs - Apr 6, 0745 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
Note: except for one sample (Location S) this sampling period represents the afternoon/evening hours of April 5.

NYC / ER (Apr 6, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location M1-duplicate) was not collected due to an equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Mar 24, 0735 - 2138 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Apr 1, 0700 - 2041 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Apr 2, 0756 - 2208 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Apr 3, 0751 - 2052 hrs)

1 of 19 samples analyzed was above the TEM AHERA standard.
Exceedance of the TEM AHERA standard occurred at Location B-14 (91.86 S/mm^2).

Fresh Kills (Apr 4, 0820 hrs - Apr 5, 0653 hrs)

All 18 samples analyzed were below the TEM AHERA standard.
1 sample (Location W-12B) was not collected due to an equipment malfunction.
Note: except for one sample (Location P-6) this sampling period represents April 4.

Fresh Kills (Apr 5, 0743 - 2212 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Mar 15) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Fresh Kills (Mar 21) - Metals

5 samples collected.
All metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of chromium identified in the quality control (QC) samples (blanks) indicate that chromium is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

Fresh Kills (Apr 10) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (March 19) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (March 21) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 25) - Metals

Resubmittal: of analytical results for January 25 (previously reported in the March 14 Sampling Situation Report).
All metals remain as either not detected or below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Previously noted that elevated levels of lead identified in the quality control (QC) samples (blanks) indicate that lead is not present in the sample collected at Location S at levels sufficiently above those in the control samples to be considered a valid result. **The lead results for Location S were revised to nondetect, therefore the previous statement is no longer relevant.**

NYC / ER (Mar 21) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Mar 26) - Silicates

All 10 samples either did not detect any silicates or were below the NIOSH Recommended Exposure Limit (REL) TWA of 0.05 mg/m^3.

NYC / ER (Mar 28) - Silicates

All 10 samples either did not detect any silicates or were below the NIOSH Recommended Exposure Limit (REL) TWA of 0.05 mg/m^3.

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Mar 26) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 3 samples were collected from these monitoring sites.
4 samples (Sites 1, 2, 7, and 8) were not analyzed due to equipment malfunctions.
All of the samples were below the TEM AHERA standard.

NYC / ER (Mar 29 - Apr 2) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 33 samples were collected from these monitoring sites.
2 samples (Site 5) were not collected on March 30 and March 31 due to access problems.
All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 10) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 19.82 ug/m^3 with a maximum reading of 38.83 ug/m^3.
Station N had an average of 17.56 ug/m^3 with a maximum reading of 39.82 ug/m^3.
Station R had an average of 19.75 ug/m^3 with a maximum reading of 40.59 ug/m^3.

NYC / ER (Apr 10) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 03/26/2002**
Sampling Date and Time: 3/9/02 0001 to 1200

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/09/02	FB030902	Field Blank	0	Air	<7.0	n/a	NA[(2)]	NA[(2)]	NA[(2)]	NA[(2)]
03/09/02	TB030902	Trip Blank	0	Air	<7.0	n/a	NA[(2)]	NA[(2)]	NA[(2)]	NA[(2)]
03/09/02	TTW-01298	E	1179	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/09/02	TTW-01299	S	1258.25	Air	<7.0	<0.002	0	0	<16.00	<0.0049
03/09/02	TTW-01300	U	1296	Air	<7.0	<0.002	0	0	<13.33	<0.0040
03/09/02	TTW-01301	V	1215	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/09/02	TTW-01302	K	1230.25	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/09/02	TTW-01303	D	1126.65	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/09/02	TTW-01304	C	1126.8	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/09/02	TTW-01305	B	965.7	Air	<7.0	<0.003	0	0	<11.43	<0.0046
03/09/02	TTW-01306	A	1245.5	Air	<7.0	<0.002	***1	0	13.33	0.0041
03/09/02	TTW-01307	F	1278	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/09/02	TTW-01308	Q	1584	Air	<7.0	<0.002	0	0	<16.00	<0.0039
03/09/02	TTW-01309	J	1111.85	Air	<7.0	<0.002	0	0	<13.33	<0.0046
03/09/02	TTW-01310	J-Dup	1128.6	Air	<7.0	<0.002	0	0	<13.33	<0.0045
03/09/02	TTW-01311	N	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/09/02	TTW-01312	M1	1161	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/09/02	TTW-01313	L	1212.75	Air	<7.0	<0.002	0	0	<13.33	<0.0042
03/09/02	TTW-01314	L-Dup	1159.2	Air	<7.0	<0.002	0	0	<13.33	<0.0044
03/09/02	TTW-01315	W	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA[(1)] - Not analyzed due to overloading of particulates
NA[(2)] - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-03-09-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/4/02 0001 to 1200

Data Validation Date: 04/09/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
04/04/02	FB040402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/04/02	TB040402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/04/02	TTW-02223	W	1440	Air	17.83	0.005	0	0	<16.00	<0.0043
04/04/02	TTW-02224	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02225	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02226	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02227	U	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/04/02	TTW-02228	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02229	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02230	D	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/04/02	TTW-02232	C-Dup	1390	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/04/02	TTW-02233	B	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/04/02	TTW-02234	A	1200	Air	<7.0	<0.002	0	0	<13.33	<0.0043
04/04/02	TTW-02235	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02236	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02237	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02238	N-Dup	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/04/02	TTW-02239	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02240	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample submitted for Location C due to flow fault

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I: SE corner of Wall St. & Broadway
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W: Wash Tent Common Area

Key:
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*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
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NA(2) - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-04-04-02-am rev1.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/09/02**
Sampling Date and Time: **4/4/02 1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S-f/cc**
04/04/02	TTW-02241	W	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02242	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02243	Q-Dup	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/04/02	TTW-02244	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02245	E-Dup	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/04/02	TTW-02246	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02247	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02248	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02249	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02250	D	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02251	C	1278	Air	7.01	0.002	0	0	<16.00	<0.0048
04/04/02	TTW-02252	B	1360	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/04/02	TTW-02253	A	1440	Air	8.28	0.002	***1	0	16	0.0043
04/04/02	TTW-02254	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02255	J	1476	Air	8.92	0.002	0	0	<16.00	<0.0042
04/04/02	TTW-02256	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	TTW-02257	M1	1109.05	Air	<7.0	<0.002	0	0	<13.33	<0.0046
04/04/02	TTW-02258	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
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F: Northern median strip of Vesey & West St
G: Church and Duane St.
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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Key:
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**** Tremolite
***** Amosite
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NA(2) - Not analyzed for TEM
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/09/02**
Sampling Date and Time: 4/3/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
04/03/02	TTW-02205	W	1440	Air	24.2	0.006	***1	0	16	0.0043
04/03/02	TTW-02206	Q	1440	Air	10.19	0.003	0	0	<16.00	<0.0043
04/03/02	TTW-02207	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02208	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02209	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02210	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02211	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02212	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02213	D-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02214	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02215	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02216	A	1404	Air	7.01	0.002	***3	0	48	0.0132
04/03/02	TTW-02218	J	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02219	J-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	TTW-02220	N	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/03/02	TTW-02221	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/03/02	TTW-02222	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample Submitted for Location F due to flow fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/5/02 0001 to 1200

Data Validation Date: 04/09/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
04/05/02	FB040502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/05/02	TB040502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/05/02	TTW-02259	W	1440	Air	10.83	0.003	0	0	<16.00	<0.0043
04/05/02	TTW-02260	Q	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/05/02	TTW-02261	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02262	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02263	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02264	U-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02265	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02266	V-Dup	1293.9	Air	<7.0	<0.002	0	0	<16.00	<0.0048
04/05/02	TTW-02267	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02268	D	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/05/02	TTW-02269	C	1440	Air	15.29	0.004	0	****1	16	0.0043
04/05/02	TTW-02270	B	1404	Air	13.38	0.004	0	0	<16.00	<0.0044
04/05/02	TTW-02271	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02272	F	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/05/02	TTW-02273	J	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/05/02	TTW-02274	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02275	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02276	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
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I: SE corner of Wall St. & Broadway
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-04-05-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/5/02 1200 to 4/6/02 0745

Data Validation Date: 04/10/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/05/02	TTW-02277	W	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02279	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02280	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02281	S	2310.75	Air	<7.0	<0.001	0	0	<20.00	<0.0033
04/05/02	TTW-02282	S-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02283	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02284	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02285	K	1263.6	Air	<7.0	<0.002	0	0	<16.00	<0.0049
04/05/02	TTW-02286	D	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/05/02	TTW-02287	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02288	B	1440	Air	8.28	0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02289	B-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02290	A	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/05/02	TTW-02291	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	TTW-02292	J	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/05/02	TTW-02293	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/05/02	TTW-02294	M1	1300.65	Air	<7.0	<0.002	0	0	<16.00	<0.0047
04/05/02	TTW-02295	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

TTW-02278 was misplaced on wrong cassette and was voided
TTW-02881 ran for almost 20 hours. (19 hours 45 mins)

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Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-05-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/6/02 0001 to 1200

Data Validation Date: 04/10/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/06/02	FB040602	Field Blank	0	Air	<7.0	n/a	NA(1)	NA(2)	NA(2)	NA(2)
04/06/02	TB040602	Trip Blank	0	Air	<7.0	n/a	NA(1)	NA(2)	NA(2)	NA(2)
04/06/02	TTW-02297	W	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02296	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02298	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02299	S	1390	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/06/02	TTW-02300	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/06/02	TTW-02301	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02302	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02303	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02304	C	1440	Air	9.55	0.003	***2	0	32	0.0086
04/06/02	TTW-02305	B	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/06/02	TTW-02306	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02307	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02308	J	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/06/02	TTW-02309	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02310	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02312	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02313	L-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
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Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-06-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 3/24/02 0735 to 2138

Data Validation Date: 03/17/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
03/24/02	LF03632	P-1	1074.60	Air	<7.0	<0.003	0	0	<13.12	<0.0047
03/24/02	LF03633	P-2	1229.40	Air	<7.0	<0.002	***2	0	31.5	0.0099
03/24/02	LF03634	P-3	1234.80	Air	<7.0	<0.002	0	***1	15.75	0.0049
03/24/02	LF03635	P-4	1144.80	Air	<7.0	<0.002	0	0	<13.12	<0.0044
03/24/02	LF03636	P-5	1195.10	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/24/02	LF03637	P-6	1123.20	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/24/02	LF03638	P-7	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/24/02	LF03639	P-8	1036.80	Air	<7.0	<0.003	0	0	<13.12	<0.0049
03/24/02	LF03640	W-12A	1254.00	Air	45.86	0.014	0	0	<15.75	<0.0048
03/24/02	LF03641	W-12R	1145.70	Air	<7.0	<0.002	***1	0	13.12	0.0044
03/24/02	LF03642	B-13	1171.05	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/24/02	LF03643	B-14	1196.80	Air	<7.0	<0.002	0	0	<13.12	<0.0042
03/24/02	LF03644	T-15	1260.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
03/24/02	LF03645	T-16	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
03/24/02	LF03646	O-17	1166.40	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/24/02	LF03647	O-18	1283.40	Air	<7.0	<0.002	0	0	<15.75	<0.0047
03/24/02	LF03648	O-19	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
03/24/02	LF03649	MPHS-20	1176.10	Air	<7.0	<0.002	0	0	<13.12	<0.0043
03/24/02	LF03650	W-12B Dup	1130.40	Air	<7.0	<0.002	0	0	<13.12	<0.0045
03/24/02	LF03651	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
03/24/02	LF03652	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (filters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
n/a - Not applicable
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-03-24-02rev1.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/1/02 0700 to 2041

Data Validation Date: 04/07/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
04/01/02	LF03779	P-1	1006.20	Air	<7.0	<0.003	0	0	<11.25	<0.0043
04/01/02	LF03780	P-2	721.80	Air	7.64	0.004	***1	0	8.75	0.0047
04/01/02	LF03781	P-3	1030.20	Air	<7.0	<0.003	0	0	<13.12	<0.0049
04/01/02	LF03782	P-4	1051.20	Air	<7.0	<0.003	0	0	<13.12	<0.0048
04/01/02	LF03783	P-5	1274.40	Air	<7.0	<0.002	0	0	<15.75	<0.0048
04/01/02	LF03784	P-6	1123.20	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/01/02	LF03785	P-7	957.00	Air	<7.0	<0.003	0	0	<11.25	<0.0045
04/01/02	LF03786	P-8	1012.70	Air	<7.0	<0.003	***1	0	11.25	0.0043
04/01/02	LF03787	W-12A	1135.60	Air	22.93	0.008	0	0	<13.12	<0.0044
04/01/02	LF03788	W-12B	1224.00	Air	<7.0	<0.002	***1	0	15.75	0.0050
04/01/02	LF03789	B-13	1112.40	Air	<7.0	<0.002	***1	0	13.12	0.0045
04/01/02	LF03790	B-14	1288.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/01/02	LF03791	T-15	1296.00	Air	15.29	0.005	0	0	<15.75	<0.0047
04/01/02	LF03792	T-16	1296.00	Air	19.11	0.006	***1	0	15.75	0.0047
04/01/02	LF03793	O-17	1227.60	Air	<7.0	<0.002	0	0	<15.75	<0.0049
04/01/02	LF03794	O-18	1053.00	Air	<7.0	<0.003	0	0	<13.12	<0.0048
04/01/02	LF03795	O-19	1006.20	Air	<7.0	<0.003	0	0	<11.25	<0.0043
04/01/02	LF03796	MPHS-20	1015.20	Air	<7.0	<0.003	0	0	<11.25	<0.0043
04/01/02	LF03797	P-4 Dup	1076.40	Air	<7.0	<0.003	***1	0	13.12	0.0047
04/01/02	LF03798	Lot Blank	0.00	Air	<7.0	n/a	NA(3)	NA(3)	NA(3)	NA(3)
04/01/02	LF03799	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-04-01-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/2/02 0756 to 2208

Data Validation Date: 04/09/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
04/02/02	LF03800	P-1	1220.70	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/02/02	LF03801	P-2	1063.80	Air	<7.0	<0.003	0	0	<13.12	<0.0047
04/02/02	LF03802	P-3	1132.20	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/02/02	LF03803	P-4	1022.40	Air	<7.0	<0.003	0	0	<13.12	<0.0049
04/02/02	LF03804	P-5	1150.20	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/02/02	LF03805	P-6	1207.05	Air	<7.0	<0.002	0	0	<13.12	<0.0042
04/02/02	LF03806	P-7	1265.40	Air	<7.0	<0.002	0	0	<13.12	<0.0040
04/02/02	LF03807	P-8	1211.40	Air	<7.0	<0.002	0	0	<13.12	<0.0042
04/02/02	LF03808	W-12A	1123.20	Air	11.46	0.004	0	0	<13.12	<0.0045
04/02/02	LF03809	W-12B	1225.80	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/02/02	LF03810	B-13	1064.20	Air	<7.0	<0.003	0	0	<13.12	<0.0047
04/02/02	LF03811	B-14	1116.00	Air	7.64	0.003	***4	0	52.49	0.018†
04/02/02	LF03812	T-15	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/02/02	LF03813	T-16	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/02/02	LF03814	O-17	1198.80	Air	<7.0	<0.002	0	0	<13.12	<0.0042
04/02/02	LF03815	O-18	1144.80	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/02/02	LF03816	O-19	926.40	Air	<7.0	<0.003	0	0	<11.25	<0.0047
04/02/02	LF03817	MPHS-20	1230.45	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/02/02	LF03818	P-8 Dup	1259.70	Air	<7.0	<0.002	0	0	<13.12	<0.0040
04/02/02	LF03819	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/02/02	LF03820	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-04-02-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/3/02 0751 to 2052

Data Validation Date: 04/09/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/03/02	LF03821	P-1	993.60	Air	<7.0	<0.003	0	0	<11.25	<0.0044
04/03/02	LF03822	P-2	1163.75	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/03/02	LF03823	P-3	1242.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/03/02	LF03824	P-4	1179.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/03/02	LF03825	P-5	1220.40	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/03/02	LF03826	P-6	1086.75	Air	<7.0	<0.002	0	0	<13.12	<0.0046
04/03/02	LF03827	P-7	1074.40	Air	<7.0	<0.003	0	0	<13.12	<0.0047
04/03/02	LF03828	P-8	1035.00	Air	8.92	0.003	0	0	<13.12	<0.0049
04/03/02	LF03829	W-12A	1145.10	Air	10.19	0.003	0	***1	13.12	0.0044
04/03/02	LF03830	W-12B	1011.50	Air	<7.0	<0.003	0	0	<13.12	<0.0050
04/03/02	LF03831	B-13	863.60	Air	<7.0	<0.003	***1	0	9.84	0.0044
04/03/02	LF03832	B-14	1099.80	Air	14.01	0.005	***6	***1	91.86	0.0322
04/03/02	LF03833	T-15	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/03/02	LF03834	T-16	1296.00	Air	8.92	0.003	0	0	<13.12	<0.0039
04/03/02	LF03835	O-17	1121.40	Air	<7.0	<0.002	***1	0	13.12	0.0045
04/03/02	LF03836	O-18	1094.40	Air	<7.0	<0.002	0	0	<13.12	<0.0046
04/03/02	LF03837	O-19	1184.40	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/03/02	LF03838	MPHS-20	1056.60	Air	<7.0	<0.003	***1	0	13.12	0.0048
04/03/02	LF03839	P-7 Dup	1156.75	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/03/02	LF03840	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/03/02	LF03841	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-04-03-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/4/02 0820 to 4/5/02 0653

Data Validation Date: 04/09/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
04/04/02	LF03842	P-1	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/04/02	LF03843	P-2	1170.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/04/02	LF03844	P-3	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/04/02	LF03845	P-4	615.60	Air	<7.0	<0.004	0	0	<7.87	<0.0049
04/04/02	LF03846	P-5	1260.00	Air	<7.0	<0.002	0	0	<13.12	<0.0040
04/04/02	LF03847	P-6	2230.20	Air	<7.0	<0.001	***3	0	59.06	0.0102
04/04/02	LF03848	P-7	1260.00	Air	<7.0	<0.002	0	0	<13.12	<0.0040
04/04/02	LF03849	P-8	1166.40	Air	<7.0	<0.002	***3	0	39.37	0.0130
04/04/02	LF03850	W-12A	1296.00	Air	22.93	0.007	0	0	<13.12	<0.0039
04/04/02	LF03852	B-13	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/04/02	LF03853	B-14	1128.80	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/04/02	LF03854	T-15	1296.00	Air	16.56	0.005	0	0	<13.12	<0.0039
04/04/02	LF03855	T-16	1260.00	Air	<7.0	<0.002	0	0	<13.12	<0.0040
04/04/02	LF03856	O-17	1161.10	Air	<7.0	<0.002	***1	0	13.12	0.0044
04/04/02	LF03857	O-18	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/04/02	LF03858	O-19	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/04/02	LF03859	MPHS-20	1260.00	Air	<7.0	<0.002	0	0	<13.12	<0.0040
04/04/02	LF03860	P-6 Dup	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/04/02	LF03861	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/04/02	LF03862	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

No Sample submitted for Location W12 B due to flow fault
Sample LF03827 ran for over 20 hours (20 hours 39 mins)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
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NA (3) - Not analyzed due to wet filter
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-04-04-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/5/02 0743 to 2212

Data Validation Date: 04/10/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/05/02	LF03863	P-1	1224.00	Air	<7.0	<0.002	***1	0	13.12	0.0041
04/05/02	LF03864	P-2	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/05/02	LF03865	P-3	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/05/02	LF03866	P-4	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/05/02	LF03867	P-5	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/05/02	LF03868	P-6	1260.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
04/05/02	LF03869	P-7	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/05/02	LF03870	P-8	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/05/02	LF03871	W-12A	1008.00	Air	<7.0	<0.003	0	0	<11.25	<0.0043
04/05/02	LF03872	W-12B	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/05/02	LF03873	B-13	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
04/05/02	LF03874	B-14	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/05/02	LF03875	T-15	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/05/02	LF03876	T-16	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/05/02	LF03877	O-17	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
04/05/02	LF03878	O-18	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/05/02	LF03879	O-19	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
04/05/02	LF03880	MPHS-20	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/05/02	LF03881	P-5 Dup	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
04/05/02	LF03882	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/05/02	LF03883	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
***** Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
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NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-04-05-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/8/02**
Sampling Date and Time: 3/26/02 1200 to 2108

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume***	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/26/02	7093-15-0178	I.S. 143 Manhattan	1096	Air	<7.0	<0.002	0	0	<13.33	<0.0047
03/26/02	7094-09-0168	P.S. 154 (Bronx)	716	Air	<7.0	<0.004	0	0	<8.00	<0.0043
03/26/02	7096-12-0174	P.S. 199 (Queens)	824	Air	<7.0	<0.003	0	0	<10.00	<0.0047

Sample for the Locations Park Row, Chambers Street, P.S. 274, and P.S. 44 were not analyzed due to low volumes

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 3/31/02 1200 to 2400

Data Validation Date: 4/9/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
03/31/02	7093-18-0185	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	7093-19-0185	Chambers Street	1414	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/31/02	7093-15-0183	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	7096-12-0178	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	7095-98-0179	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/31/02	7097-18-0176	P.S. 44 (S I)	1298	Air	<7.0	<0.002	0	0	<16.00	<0.0047

No Sample was submitted for Location P.S 154 - Bronx due to there was no access to the pump

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-03-31-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/9/02**
Sampling Date and Time: **3/30/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
03/30/02	7093-18-0184	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	7093-19-0184	Chambers Street	1360	Air	<7.0	<0.002	0	0	<16.00	<0.0045
03/30/02	7093-15-0182	I.S. 143 Manhattan	1396	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/30/02	7096-12-0178	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/30/02	7095-98-0178	P.S. 274 (Brooklyn)	1296	Air	<7.0	<0.002	0	0	<16.00	<0.0048
03/30/02	7097-18-0175	P.S. 44 (S I)	1328	Air	<7.0	<0.002	0	0	<16.00	<0.0046

No Sample was submitted for Location P.S 154 - Bronx due to there was no access to the pump

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/5/02**
Sampling Date and Time: 3/29/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
03/29/02	7093-18-0183	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	7093-19-0183	Chambers Street	1424	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	7093-15-0181	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	7094-09-0170	P.S. 154 (Bronx)	1428	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	7096-12-0177	P.S. 199 (Queens)	1398	Air	<7.0	<0.002	0	0	<16.00	<0.0044
03/29/02	7095-98-0177	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
03/29/02	7097-18-0174	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/5/02**
Sampling Date and Time: **4/1/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/01/02	7093-18-0186	Park Row	1282	Air	<7.0	<0.002	0	0	<13.33	<0.0040
04/01/02	7093-19-0186	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	7093-15-0184	I.S. 143 Manhattan	1376	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/01/02	7094-09-0172	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	7096-12-0180	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/01/02	7095-98-0180	P.S. 274 (Brooklyn)	1376	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/01/02	7097-18-0177	P.S. 44 (S.I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/10/02**
Sampling Date and Time: **4/2/02** **1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/02/02	7093-18-0187	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	7093-19-0187	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	7093-15-0185	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	7094-09-0173	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	7096-12-0181	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	7095-98-0181	P.S. 274 (Brooklyn)	1432	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/02/02	7097-18-0178	P.S. 44 (S I)	1244	Air	<7.0	<0.002	0	0	<13.33	<0.0041

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/18/02

Sample No.	WG7167-1			06808			06807			06806			06805			06804			06803		
Sampling Location	Method Blank			Location A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.			Location S		
Volume (Liters)	0			6375			5945			6315			6315			6015			9720		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0031	U		0.0029	U		0.0032	U		0.0032	U		0.0033	U		0.0021
12378-PeCDD	0.0029 J		0.10	U		0.016	U		0.014	U		0.016	U		0.016	U		0.017	U		0.010
123478-HxCDD	U	0.0027	0.10	U		0.016	U		0.014	U		0.016	U		0.016	U		0.017	U		0.010
123678-HxCDD	U	0.0028	0.10	U		0.016	U		0.014	U		0.016	U		0.016	U		0.017	U		0.010
123789-HxCDD	U	0.0026	0.10	U		0.016	U		0.014	U		0.016	U		0.016	U		0.017	U		0.010
1234678-HpCDD	0.0053 J		0.10	0.0009 J		0.016	U	0.0014	0.014	0.0013 J		0.016	0.0008 J		0.016	0.0009 J		0.017	U	0.0006	0.010
OCDD	U	0.0148	0.20	U	0.0024	0.031	U		0.029	0.0035 J		0.032	0.0027 J		0.032	0.0048 J		0.033	0.0028 J		0.021
2378-TCDF	U		0.020	U		0.0031	U		0.0029	U		0.0032	U		0.0032	U		0.0033	U		0.0021
12378-PeCDF	0.0026 J		0.10	U		0.016	U		0.014	U		0.016	0.0002 J		0.016	U	0.0002	0.017	0.0001 J		0.010
23478-PeCDF	0.0023 J		0.10	U		0.016	U	0.0003	0.014	U		0.016	0.0002 J		0.016	U	0.0001	0.017	0.0001 J		0.010
123478-HxCDF	0.0018 J		0.10	U	0.0003	0.016	U		0.014	0.0003 J		0.016	U		0.016	U	0.0003	0.017	U		0.010
123678-HxCDF	0.0024 J		0.10	U	0.0004	0.016	U		0.014	0.0004 J		0.016	0.0002 J		0.016	U	0.0002	0.017	U		0.010
234678-HxCDF	U	0.0022	0.10	0.0003 J		0.016	U		0.014	0.0008 J		0.016	U		0.016	U		0.017	U		0.010
123789-HxCDF	U	0.0028	0.10	U		0.016	U		0.014	0.0002 J		0.016	U		0.016	U		0.017	U		0.010
1234678-HpCDF	U		0.10	U		0.016	U		0.014	U	0.0004	0.016	0.0002 J		0.016	0.0002 J		0.017	U	0.0002	0.010
1234789-HpCDF	U	0.0017	0.10	U		0.016	U		0.014	U		0.016	U		0.016	U		0.017	U		0.010
OCDF	U	0.0024	0.20	U		0.031	U		0.029	U		0.032	U		0.032	U		0.033	U		0.021
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	0.0029			U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U			U		
Total HpCDDs	0.0053			0.0009			U			0.0013			0.0008			0.0009			0.0004		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	0.0049			U			U			U			0.0004			U			0.0002		
Total HxCDFs	0.0042			0.0003			U			0.0015			0.0002			U			U		
Total HpCDFs	U			U			U			U			0.0002			0.0002			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0037			0.0000			0.0003			0.0001			0.0001			0.0000			0.0001		
TEQ (ND=1/2)	0.0181			0.0013			0.0018			0.0013			0.0006			0.0006			0.0003		

COC# 03/18/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent
NA Not Analyzed . Sample not received by the laboratory
The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

ERTC 4/03/02

3-19-02dioxir.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/19/02

Sample No.	06802			06801			06800			06799			06809			06810		
Sampling Location	Location S			Location P			Location E			R- TAGA			Field Blank			Lot Blank		
Volume (Liters)	7290			7470			7089			7209			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0027	U		0.0028	U		0.0028	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.013	U		0.014	0.0003 J		0.014	U		0.10	U		0.10
123478-HxCDD	U		0.014	U		0.013	U	0.0004	0.014	U	0.0003	0.014	U		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.013	U		0.014	0.0004 J		0.014	U		0.10	U		0.10
123789-HxCDD	U		0.014	U		0.013	0.0004 J		0.014	U	0.0005	0.014	U		0.10	U		0.10
1234678-HpCDD	0.0049 J		0.014	0.0011 J		0.013	0.0017 J		0.014	0.0027 J		0.014	U		0.10	U		0.10
OCDD	U	0.0026	0.027	0.0028 J		0.027	0.0033 J		0.028	0.0068 J		0.028	U		0.20	U		0.20
2378-TCDF	U		0.0027	U		0.0027	U		0.0028	U		0.0028	U		0.020	U		0.020
12378-PeCDF	U		0.014	U	0.0002	0.013	U	0.0002	0.014	0.0002 J		0.014	U		0.10	U		0.10
23478-PeCDF	0.0002 J		0.014	U	0.0002	0.013	U	0.0002	0.014	U		0.014	U		0.10	U		0.10
123478-HxCDF	U		0.014	U		0.013	U	0.0002	0.014	U		0.014	U		0.10	U		0.10
123678-HxCDF	U		0.014	U		0.013	U	0.0002	0.014	U	0.0002	0.014	U		0.10	U		0.10
234678-HxCDF	U		0.014	U	0.0002	0.013	U	0.0002	0.014	U		0.014	U		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.013	U		0.014	U		0.014	U		0.10	U		0.10
1234678-HpCDF	U		0.014	U		0.013	0.0003 J		0.014	0.0003 J		0.014	U		0.10	U		0.10
1234789-HpCDF	U		0.014	U		0.013	U		0.014	U		0.014	U		0.10	U		0.10
OCDF	U		0.027	U		0.027	U		0.028	U		0.028	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			0.0005			U			U		
Total HxCDDs	U			U			0.0004			0.0004			U			U		
Total HpCDDs	0.0009			0.0011			0.0028			0.0048			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	0.0002			0.0000			U			0.0004			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			0.0004			0.0003			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0001			0.0000			0.0001			0.0002			0.0000			0.0000		
TEQ (ND=1/2)	0.0006			0.0005			0.0005			0.0008			0.0417			0.0419		

CDCF 03/19/02 dioxin

3-19-02dioxin.xls

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0125		WTC-0126		WTC-0129	
Location		Lab		Lab		Lab		Field Blank		Lab Blank		P-5	
Air Volume (L)		-		-		-		0		0		4410	
Date Collected		-		-		-		03/15/02		03/15/02		03/15/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	0.32	0.28
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.028
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.028
Calcium	ICAP	4.1	2.5	3.5	2.5	3.7	2.5	U	2.5	U	2.5	1.7	0.57
Chromium	ICAP	0.81	0.13	0.65	0.13	0.77	0.13	0.14	0.13	0.30	0.13	U	0.028
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.057
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.057
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.85	0.14
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.024	0.011
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.8
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.028
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.057
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	11
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.028
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.8
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.011
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.057
Zinc	ICAP	0.60	0.25	0.30	0.25	0.41	0.25	U	0.25	U	0.25	0.083	0.057

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0(cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0121		WTC-0122		WTC-0123		WTC-0124	
Location		P-8		O-17		O-18		O-19	
Air Volume (L)		3105		5877		4655		4646	
Date Collected		03/15/02		03/15/02		03/15/02		03/15/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.40	U	0.21	0.37	0.27	0.32	0.27
Antimony	AA-Fur	U	0.016	U	0.0085	U	0.011	U	0.011
Arsenic	AA-Fur	U	0.016	U	0.0085	U	0.011	U	0.011
Barium	ICAP	U	0.04	U	0.021	0.039	0.027	0.029	0.027
Beryllium	ICAP	U	0.016	U	0.0085	U	0.011	U	0.011
Cadmium	ICAP	U	0.04	U	0.021	U	0.027	U	0.027
Calcium	ICAP	U	0.81	0.54	0.43	1.3	0.54	0.89	0.54
Chromium	ICAP	U	0.04	U	0.021	U	0.027	U	0.027
Cobalt	ICAP	U	0.081	U	0.043	U	0.054	U	0.054
Copper	ICAP	U	0.081	U	0.043	U	0.054	U	0.054
Iron	ICAP	0.37	0.20	0.37	0.11	0.82	0.13	0.65	0.13
Lead	AA-Fur	U	0.016	U	0.0085	0.015	0.011	0.012	0.011
Magnesium	ICAP	U	4.0	U	2.1	U	2.7	U	2.7
Manganese	ICAP	U	0.04	U	0.021	U	0.027	U	0.027
Nickel	ICAP	U	0.081	U	0.043	U	0.054	0.066	0.054
Potassium	ICAP	U	16	U	8.5	U	11	U	11
Selenium	AA-Fur	U	0.016	U	0.0085	U	0.011	U	0.011
Silver	ICAP	U	0.04	U	0.021	U	0.027	U	0.027
Sodium	ICAP	U	4.0	U	2.1	U	2.7	U	2.7
Thallium	AA-Fur	U	0.016	U	0.0085	U	0.011	U	0.011
Vanadium	ICAP	U	0.081	U	0.043	U	0.054	U	0.054
Zinc	ICAP	0.093	0.081	U	0.043	0.068	0.054	U	0.054

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/21/02

Sample No.	WG71878-C1			06820			06819			06818			06817			06816			06815		
Sampling Location	Method Blank			Location A			Location 3A			B-Church & Dey St.			C-Liberty St. & Church St.			D Greenwich & Albany St.			Location S		
Volume (Liters)	0			5295			7845			6180			7530			6699			7320		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0038	U		0.0025	U		0.0032	U		0.0027	U		0.0030	U		0.0027
12378-PeCDD	U	0.0034	0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
123478-HxCDD	0.0058 J	-	0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
123678-HxCDD	U	0.0038	0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
123789-HxCDD	U	0.0084	0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
1234678-HpCDD	U	0.0087	0.10	U		0.019	U		0.013	U		0.018	0.0009 J		0.013	0.0009 J		0.015	U		0.014
OCDD	0.0319 J		0.20	U		0.038	U		0.025	U	0.0039	0.032	U		0.027	U	0.0043	0.030	U		0.027
2378-TCDF	U		0.020	U		0.0038	U		0.0025	U		0.0032	U		0.0027	U		0.0030	U		0.0027
12378-PeCDF	0.0036 J		0.10	U		0.019	U		0.013	U		0.016	U	0.0002	0.013	U		0.015	U		0.014
23478-PeCDF	U	0.0032	0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
123478-HxCDF	U	0.0045	0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
123678-HxCDF	0.0042 J		0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
234678-HxCDF	0.0038 J		0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
123789-HxCDF	U	0.0042	0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
1234678-HpCDF	0.0033 J		0.10	U		0.019	U		0.013	U		0.016	U	0.0004	0.013	U		0.015	U		0.014
1234789-HpCDF	U		0.10	U		0.019	U		0.013	U		0.016	U		0.013	U		0.015	U		0.014
OCDF	U		0.20	U		0.038	U		0.025	U		0.032	U		0.027	U		0.030	U		0.027
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	0.0058			U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			0.0009			0.0009			U		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	0.0036			U			U			U			U			U			U		
Total HxCDFs	0.0080			U			U			U			U			U			U		
Total HpCDFs	0.0033			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0016			0.0000			0.0000			0.0000			0.0000			0.0000			0.0000		
TEQ (ND=1/2)	0.0375			0.0023			0.0012			0.0019			0.0017			0.0020			0.0014		

COC# 032102 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent
NA Not Analyzed . Sample not received by the laboratory
The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

ERTC 4/05/02

3-21-02dioxin.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/21/02

Sample No.	06814			06813			06812			06811			06821			06822		
Sampling Location	Location S			Location P			Location E			R. TAGA			Field Blank			Lot Blank		
Volume (Liters)	7215			7650			6810			7245			6			6		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0028	U		0.0028	U		0.0029	U		0.0028	U		0.020	U		0.020
12378-PeCDD	U		0.014	U		0.013	U		0.015	U		0.014	U		0.10	U		0.10
123478-HxCDD	U		0.014	U		0.013	U		0.015	U		0.014	U		0.10	U		0.10
123678-HxCDD	U		0.014	U		0.013	U		0.015	U		0.014	U		0.10	U		0.10
123789-HxCDD	U		0.014	U		0.013	U		0.015	U		0.014	U		0.10	U		0.10
1234678-HpCDD	0.0011 J		0.014	U		0.013	U		0.015	0.0009 J		0.014	U		0.10	U		0.10
OCDD	U		0.028	U	0.0033	0.026	U		0.029	U		0.028	U		0.20	0.0455 J		0.20
2378-TCDF	U		0.0028	U		0.0026	U		0.0029	U		0.0028	U		0.020	U		0.020
12378-PeCDF	U	0.0002	0.014	U		0.013	U		0.015	U	0.0003	0.014	U		0.10	U		0.10
23478-PeCDF	U		0.014	U		0.013	0.0003 J		0.015	0.0003 J		0.014	U		0.10	U		0.10
123478-HxCDF	U		0.014	U		0.013	U		0.015	U	0.0003	0.014	U		0.10	U		0.10
123678-HxCDF	U		0.014	U		0.013	U		0.015	U	0.0004	0.014	U		0.10	U		0.10
234678-HxCDF	U		0.014	U		0.013	U		0.015	U	0.0004	0.014	U		0.10	U		0.10
123789-HxCDF	U		0.014	U		0.013	U		0.015	U	0.0003	0.014	U		0.10	U		0.10
1234678-HpCDF	U		0.014	U		0.013	U		0.015	U	0.0004	0.014	U		0.10	U		0.10
1234789-HpCDF	U		0.014	U		0.013	U		0.015	U		0.014	U		0.10	U		0.10
OCDF	U		0.028	U		0.026	U		0.029	U		0.028	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	0.0011			U			U			0.0009			U			U		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			0.0003			0.0003			U			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0002			0.0002			0.0000			0.0000		
TEQ (ND=1/2)	0.0015			0.0012			0.0016			0.0015			0.0401			0.0401		

COC# 05/21/02 dioxin

3-21-02dioxin.xls

Table 1 0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		Media Blank #1		Media Blank#2		Media Blank#3		WTC-0132		WTC-0133		WTC-0127	
Location		Lab		Lab		Lab		Field Blank		Lot Blank		P-5	
Air Volume (L)		-		-		-		0		0		4850	
Date Collected		-		-		-		03/21/02		03/21/02		03/21/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	0.26
Antimony	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Arsenic	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Barium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Beryllium	ICAP	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Cadmium	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Calcium	ICAP	3.6	2.5	3.6	2.5	3.8	2.5	U	2.5	U	2.5	0.72	0.52
Chromium	ICAP	0.53	0.13	0.54	0.13	0.84	0.13	U	0.13	U	0.13	U	0.026
Cobalt	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Copper	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Iron	ICAP	U	0.63	U	0.63	U	0.63	U	0.63	U	0.63	0.41	0.13
Lead	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	0.023	0.01
Magnesium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Manganese	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Nickel	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Potassium	ICAP	U	50	U	50	U	50	U	50	U	50	U	10
Selenium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Silver	ICAP	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.026
Sodium	ICAP	U	13	U	13	U	13	U	13	U	13	U	2.6
Thallium	AA-Fur	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.01
Vanadium	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.052
Zinc	ICAP	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	0.058	0.052

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.0 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) Landfill site

Client ID		WTC-0128		WTC-0129		WTC-0130		WTC-0131	
Location		P-8		O-17		O-18		O-19	
Air Volume (L)		3960		2320		4640		4590	
Date Collected		03/21/02		03/21/02		03/21/02		03/21/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.32	U	0.54	U	0.27	U	0.27
Antimony	AA-Fur	U	0.013	U	0.022	U	0.011	U	0.011
Arsenic	AA-Fur	U	0.013	U	0.022	U	0.011	U	0.011
Barium	ICAP	U	0.032	U	0.054	U	0.027	U	0.027
Beryllium	ICAP	U	0.013	U	0.022	U	0.011	U	0.011
Cadmium	ICAP	U	0.032	U	0.054	U	0.027	U	0.027
Calcium	ICAP	U	0.63	U	1.1	U	0.54	0.71	0.54
Chromium	ICAP	0.047	0.032	0.057	0.054	U	0.027	U	0.027
Cobalt	ICAP	U	0.063	U	0.11	U	0.054	U	0.054
Copper	ICAP	U	0.063	U	0.11	U	0.054	U	0.054
Iron	ICAP	0.30	0.16	U	0.27	0.44	0.13	0.41	0.14
Lead	AA-Fur	0.015	0.013	U	0.022	0.011	0.011	0.019	0.011
Magnesium	ICAP	U	3.2	U	5.4	U	2.7	U	2.7
Manganese	ICAP	U	0.032	U	0.054	U	0.027	U	0.027
Nickel	ICAP	U	0.063	U	0.11	U	0.054	U	0.054
Potassium	ICAP	U	13	U	22	U	11	U	11
Selenium	AA-Fur	U	0.013	U	0.022	U	0.011	U	0.011
Silver	ICAP	U	0.032	U	0.054	U	0.027	U	0.027
Sodium	ICAP	U	3.2	U	5.4	U	2.7	U	2.7
Thallium	AA-Fur	U	0.013	U	0.022	U	0.011	U	0.011
Vanadium	ICAP	U	0.063	U	0.11	U	0.054	U	0.054
Zinc	ICAP	U	0.063	U	0.11	U	0.054	0.076	0.054

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 03/28/02

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
3/28/02	TTWS-0178	A	1000	Air	<0.01	<0.02	<0.02
3/28/02	TTWS-0177	3A	990	Air	0.02 J	<0.02	<0.02
3/28/02	TTWS-0176	B	980	Air	<0.01	<0.02	<0.02
3/28/02	TTWS-0175	C	1000	Air	<0.01	<0.02	<0.02
3/28/02	TTWS-0174	C	1000	Air	<0.01	<0.02	<0.02
3/28/02	TTWS-0173	D	980	Air	<0.01	<0.02	<0.02
3/28/02	TTWS-0170	E	990	Air	<0.01	<0.02	<0.02
3/28/02	TTWS-0171	P	990	Air	<0.01	<0.02	<0.02
3/28/02	TTWS-0172	S	990	Air	<0.01	<0.02	<0.02
3/28/02	TTWS-0169	R	1000	Air	<0.01	<0.02	<0.02

:# 03/28/02-TTSilica

NS: Not sampled

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

ERT 4/08/02

NIOSH 7500: Silica crystalline by XRD

FL-03-28-02silica.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 03/26/02

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m³	Cristobalite mg/m³	Tridymite mg/m³
3/26/02	TTWS-0166	A	1000	Air	<0.01	<0.02	<0.02
3/26/02	TTWS-0165	3A	1000	Air	<0.01	<0.02	<0.02
3/26/02	TTWS-0164	B	1000	Air	<0.01	<0.02	<0.02
3/26/02	TTWS-0163	C	1000	Air	<0.01	<0.02	<0.02
3/26/02	TTWS-0162	C	1000	Air	<0.01	<0.02	<0.02
3/26/02	TTWS-0161	D	1000	Air	<0.01	<0.02	<0.02
3/26/02	TTWS-0158	E	1000	Air	<0.01	<0.02	<0.02
3/26/02	TTWS-0159	P	1000	Air	0.02 J	<0.02	<0.02
3/26/02	TTWS-0160	S	1000	Air	<0.01	<0.02	<0.02
3/26/02	TTWS-0157	R	1000	Air	<0.01	<0.02	<0.02

:# 03/26/02-TTSilica

NS: Not sampled

ERT 4/03/02

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

NIOSH 7500: Silica crystalline by XRD

FL-03-26-02silica.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 03/21/02

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
3/21/02	TTWS-0154	A	1000	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0153	3A	1000	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0152	B	990	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0151	C	960	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0150	D	1000	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0149	D	1000	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0146	E	1000	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0147	P	1000	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0148	S	960	Air	<0.01	<0.02	<0.02
3/21/02	TTWS-0145	R	1000	Air	<0.01	<0.02	<0.02

:# 03/21/02-TTSilica

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

NS: Not sampled

ERT 4/03/02

NIOSH 7500: Silica crystalline by XRD

FL-03-21-02silica.xls

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06324		06324		06324		06323		06313		06314	
Location		Lot Blank 1		Lot Blank 2		Lot Blank 3		Field Blank		Location R		Location A	
Air Volume (L)								0		4200		4150	
Date Collected		01/25/02		01/25/02		01/25/02		01/25/02		01/25/02		01/25/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.60	U	0.60	U	0.60	U J	0.60	U J	0.14	1.0 J	0.14
Antimony	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	U	0.018	U	0.018
Arsenic	AA-Fur	U	0.125	U	0.125	U	0.125	U J	0.125	U J	0.030	U J	0.030
Barium	ICAP	U	0.32	U	0.32	U	0.32	U J	0.32	U J	0.075	U J	0.076
Beryllium	ICAP	U	0.050	U	0.050	U	0.050	U J	0.050	U J	0.012	U J	0.012
Cadmium	ICAP	U	0.016	U	0.016	U	0.016	U J	0.016	U J	0.004	U J	0.004
Calcium	ICAP	U	3.5	U	3.5	U	3.5	U J	3.5	3.1 J	0.83	9.1 J	0.84
Chromium	ICAP	0.85	0.042	0.51	0.042	0.83	0.042	U J	0.042	U J	0.010	U J	0.010
Cobalt	ICAP	U	0.034	U	0.034	U	0.034	U J	0.034	U J	0.007	U J	0.008
Copper	ICAP	U	0.44	U	0.44	U	0.44	U J	0.44	U J	0.11	U J	0.11
Iron	ICAP	U	0.90	2.1	0.90	U	0.90	U J	0.90	0.91 J	0.21	2.8 J	0.21
Lead	AA-Fur	U	0.010	0.021	0.010	0.019	0.010	U	0.010	0.019	0.002	0.065	0.002
Magnesium	ICAP	U	3.3	U	3.3	U	3.3	U J	3.3	U J	0.79	1.8 J	0.80
Manganese	ICAP	U	0.078	U	0.078	U	0.078	U J	0.078	0.041 J	0.019	0.060 J	0.019
Nickel	ICAP	U	0.058	U	0.058	U	0.058	0.062 J	0.058	U J	0.014	U J	0.014
Potassium	ICAP	U	3.7	U	3.7	U	3.7	U J	3.7	U J	0.87	U J	0.89
Selenium	AA-Fur	U	0.075	U	0.075	U	0.075	U J	0.075	U J	0.018	U J	0.018
Silver	ICAP	U	0.025	U	0.025	U	0.025	U J	0.025	U J	0.006	U J	0.006
Sodium	ICAP	U	3.7	U	3.7	U	3.7	U	3.7	U	0.88	U	0.89
Thallium	AA-Fur	U	0.035	U	0.035	U	0.035	U J	0.035	U J	0.008	U J	0.008
Vanadium	ICAP	U	0.037	U	0.037	U	0.037	U J	0.037	U J	0.009	U J	0.009
Zinc	ICAP	U	0.079	0.11	0.079	U	0.079	U J	0.079	U J	0.019	U J	0.019

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06315		06316		06317		06318		06319		06320	
Location		Location 3A		Location 3A		LOC B CHURCH & DEY ST		C -LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.		P-ALBANY ST. & SOUTH END AVE	
Air Volume (L)		5116.5		3750		4690		4868.75		4660		4336.5	
Date Collected		01/25/02		01/25/02		01/25/02		01/25/02		01/25/02		01/25/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	0.43 J	0.12	1.4 J	0.16	0.38 J	0.13	0.38 J	0.12	0.42 J	0.13	0.85 J	0.14
Antimony	AA-Fur	U	0.015	0.026	0.020	U	0.016	U	0.015	U	0.016	U	0.017
Arsenic	AA-Fur	U J	0.024	U J	0.033	U J	0.027	U J	0.026	U J	0.027	U J	0.029
Barium	ICAP	U J	0.062	U J	0.084	U J	0.067	U J	0.065	U J	0.068	U J	0.073
Beryllium	ICAP	U J	0.010	U J	0.013	U J	0.011	U J	0.010	U J	0.011	U J	0.012
Cadmium	ICAP	U J	0.003	U J	0.004	U J	0.003	U J	0.003	U J	0.003	U J	0.004
Calcium	ICAP	5.1 J	0.68	16 J	0.93	4.0 J	0.74	3.2 J	0.72	4.5 J	0.76	6.7 J	0.81
Chromium	ICAP	U J	0.008	U J	0.010	U J	0.008	0.040 J	0.008	U J	0.009	U J	0.009
Cobalt	ICAP	U J	0.007	U J	0.009	U J	0.007	U J	0.007	0.008 J	0.007	U J	0.008
Copper	ICAP	U J	0.086	0.13 J	0.11	U J	0.094	U J	0.091	U J	0.095	U J	0.10
Iron	ICAP	1.5 J	0.17	5.0 J	0.24	1.9 J	0.19	2.8 J	0.18	2.3 J	0.19	2.3 J	0.20
Lead	AA-Fur	0.046	0.002	0.05	0.003	0.038	0.002	0.021	0.002	0.019	0.002	0.039	0.002
Magnesium	ICAP	0.85 J	0.79	3.1 J	0.88	U J	0.71	U J	0.68	0.71 J	0.71	2.2 J	0.77
Manganese	ICAP	0.029 J	0.015	0.087 J	0.021	0.033 J	0.017	0.045 J	0.016	0.039 J	0.017	0.039 J	0.018
Nickel	ICAP	U J	0.011	U J	0.016	U J	0.012	U J	0.012	U J	0.012	U J	0.013
Potassium	ICAP	U J	0.72	U J	0.98	U J	0.78	U J	0.75	U J	0.78	U J	0.85
Selenium	AA-Fur	U J	0.015	U J	0.020	U J	0.016	U J	0.015	U J	0.016	U J	0.017
Silver	ICAP	U J	0.005	U J	0.007	U J	0.005	U J	0.005	U J	0.005	U J	0.006
Sodium	ICAP	U	0.72	1.8	0.98	U	0.78	0.81	0.75	1.0	0.80	2.7	0.85
Thallium	AA-Fur	U J	0.007	U J	0.009	U J	0.007	U J	0.007	U J	0.008	U J	0.008
Vanadium	ICAP	U J	0.007	U J	0.010	U J	0.008	U J	0.008	U J	0.008	U J	0.008
Zinc	ICAP	U J	0.015	U J	0.021	U J	0.017	U J	0.016	U J	0.017	U J	0.018

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1 x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06321		06322	
Location		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		3645.5		3890.5	
Date Collected		01/25/02		01/25/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U J	0.17	0.20 J	0.15
Antimony	AA-Fur	U	0.021	U	0.019
Arsenic	AA-Fur	U J	0.034	U J	0.032
Barium	ICAP	U J	0.088	U J	0.081
Beryllium	ICAP	U J	0.014	U J	0.013
Cadmium	ICAP	U J	0.004	U J	0.004
Calcium	ICAP	1.5 J	0.97	2.8 J	0.89
Chromium	ICAP	0.20 J	0.011	U J	0.010
Cobalt	ICAP	U J	0.009	0.009 J	0.008
Copper	ICAP	U J	0.12	U J	0.11
Iron	ICAP	0.99 J	0.25	U J	0.23
Lead	AA-Fur	U	0.003	0.005	0.003
Magnesium	ICAP	U J	0.91	U J	0.85
Manganese	ICAP	U J	0.021	U J	0.020
Nickel	ICAP	U J	0.016	U J	0.015
Potassium	ICAP	U J	1.0	U J	0.94
Selenium	AA-Fur	U J	0.021	U J	0.019
Silver	ICAP	U J	0.007	U J	0.006
Sodium	ICAP	U	1.0	0.99	0.94
Thallium	AA-Fur	U J	0.010	U J	0.009
Vanadium	ICAP	U J	0.010	U J	0.009
Zinc	ICAP	U J	0.022	U J	0.020

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 10, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	910	07:35	10	00:00:30	1	0.0	0.1	20.9	477.5
3	74.198685	40.570054	D075	1	720	06:00	10	00:00:30	1	0.0	0.1	16.6	192.5
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	910	07:35	10	00:00:30	1	0.0	0.1	15.7	98.2
6	74.207406	40.563818	D065	1	910	07:35	10	00:00:30	1	0.0	0.1	20.7	2792.6
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D088	1	910	07:35	10	00:00:30	1	0.0	0.1	17.5	128.4

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 10, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0627	0625	0628
Stop Time	1433	1445	1431
Run Time (minutes)	486	500	483
Maximum Concentration (ug/m^3)	38.83	39.82	40.59
Average Concentration (ug/m^3)	19.82	17.56	19.75

AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/04/02

File Name	NYC1454	NYC1455	NYC1456	NYC1457	NYC1459	NYC1458
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07679	A07680	A07681	A07682
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/10/02

File Name	NYC1506	NYC1507	NYC1508	NYC1509	NYC1511	NYC1510
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07703	A07704	A07705	A07706
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday-Tuesday, April 12-16, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:00 p.m. on April 16

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 69 samples taken in and around ground zero from April 7 through April 9. EPA also sampled for asbestos at two additional lower Manhattan locations on April 3, 5, 6 and 8. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 8,016, with 21 samples above the standard (11 of these were collected prior to September 30; the other 10 were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9, March 29, March 30 and April 2).

Air Sampling for Particulates - EPA collected samples from April 11 through April 15 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted from April 11 through April 15 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from April 11 through April 15 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

Dust Sampling for Asbestos - A total of 10 samples were collected from beams, conduit insulation at both the North and South Tower excavation areas, and from an ongoing asbestos abatement area within ground zero on April 6. One sample, taken from outside the abatement area,

showed an asbestos level of greater than 1%.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 38 samples were collected on April 6 and April 8. All samples were below the school re-entry standard.

Air Monitoring for Particulates - There were no significant readings from samples collected on April 11 and April 12.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on on April 3, 5, 6 and 8, at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 199 (3290 48th St., Queens), P.S. 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn) and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, April 16, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Apr 3, 0001 - 1200 hrs)

Results pending.

NYC / ER (Apr 6, 1200 - 2400 hrs)

Results pending.

NYC / ER (Apr 7, 0001 - 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location K) was not collected due to an equipment malfunction.

NYC / ER (Apr 7, 1200 - 2400 hrs)

Results pending.

NYC / ER (Apr 7, 1534 hrs - Apr 8, 1200 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location S) was not collected due to an equipment malfunction.
Note: except for one sample (Location F) this sampling period represents the morning hours of April 8.

NYC / ER (Apr 8, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location N-duplicate) was not collected due to an equipment malfunction.

NYC / ER (Apr 9, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Apr 6, 0647 - 2257 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Apr 7)

Results pending.

Fresh Kills (Apr 8, 0830 hrs - Apr 9, 0545 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: Low sample volume reported.
Note: except for one sample (Location MPHS-20) this sampling period represents April 8.

Fresh Kills (Apr 11) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-5, P-6, and P-8) based on daily average concentrations.
Particulate measurements were not taken at Location P-3 due to an equipment malfunction.

Fresh Kills (Apr 12) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Apr 13 - 14) - Particulate Monitoring (Dataram)

Particulate measurements were not taken due to weather conditions.

Ambient Air Sampling Locations

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 3) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 4) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 5 - 6) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 7) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 8) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:
- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 11) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 13.36 ug/m^3 with a maximum reading of 49.75 ug/m^3.
Station N had an average of 21.64 ug/m^3 with a maximum reading of 43.34 ug/m^3.
Station R had an average of 27.41 ug/m^3 with a maximum reading of 45.94 ug/m^3.

NYC / ER (Apr 12) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 60.46 ug/m^3 with a maximum reading of 103.58 ug/m^3.
Station N had an average of 55.73 ug/m^3 with a maximum reading of 74.82 ug/m^3.
Station R had an average of 53.62 ug/m^3 with a maximum reading of 102.68 ug/m^3.

NYC / ER (Apr 13) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 45.14 ug/m^3 with a maximum reading of 138.50 ug/m^3.
Station N had an average of 43.34 ug/m^3 with a maximum reading of 127.06 ug/m^3.
Station R had an average of 38.43 ug/m^3 with a maximum reading of 99.34 ug/m^3.

NYC / ER (Apr 14) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 28.60 ug/m^3 with a maximum reading of 97.77 ug/m^3.
Station N had an average of 28.72 ug/m^3 with a maximum reading of 86.44 ug/m^3.
Station R had an average of 26.58 ug/m^3 with a maximum reading of 124.43 ug/m^3.

NYC / ER (Apr 15) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 35.27 ug/m^3 with a maximum reading of 121.97 ug/m^3.
Station N had an average of 29.77 ug/m^3 with a maximum reading of 69.95 ug/m^3.
Station R had an average of 27.03 ug/m^3 with a maximum reading of 59.05 ug/m^3.

NYC / ER (Apr 11) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 12) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 13) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 14) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 15) - Volatile Organics (Mobile Laboratory)

Aside from one volatile organic compound detected at the Washing Tent, no other volatiles were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Bulk Sampling

NYC / ER (Apr 6) - Asbestos

10 bulk samples collected from from beams (3), conduit insulation (1), and from an ongoing asbestos abatement area within Ground Zero (6).
Asbestos was detected in 1 of the 10 samples (as described below) at greater than 1% amosite.
1 sample outside the asbestos abatement area identified amosite at 2.00%.
The abatement area (South Projection Area) is located southwest of the North Tower.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/10/2002**
Sampling Date and Time: **4/7/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/07/02	FB040702	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/07/02	TB040702	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/07/02	TTW-02332	W	1370	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/07/02	TTW-02333	Q	1380	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/07/02	TTW-02334	Q-Dup	1380	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/07/02	TTW-02335	E	1170	Air	<7.0	<0.002	0	0	<13.33	<0.0044
04/07/02	TTW-02336	S	1410	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/07/02	TTW-02337	U	1465.75	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/07/02	TTW-02338	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02340	D	1548	Air	<7.0	<0.002	***1	0	16	0.0040
04/07/02	TTW-02341	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02342	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02343	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02344	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02345	F-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02346	J	1404	Air	7.01	0.002	0	0	<16.00	<0.0044
04/07/02	TTW-02347	N	1476	Air	<7.0	<0.002	***1	0	16	0.0042
04/07/02	TTW-02348	M1	1440	Air	<7.0	<0.002	***1	0	16	0.0043
04/07/02	TTW-02349	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

No Sample was submitted for Location K due to pump fault

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-07-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/12/2002**
Sampling Date and Time: **4/7/02 1534 to 4/8/02 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
04/07/02	FB040802	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/07/02	TB040802	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/07/02	TTW-02368	W	1476	Air	<7.0	<0.002	0	0	<15.00	<0.0042
04/07/02	TTW-02369	Q	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/07/02	TTW-02370	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02371	E-Dup	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/07/02	TTW-02373	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/07/02	TTW-02374	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02375	K	1150.8	Air	<7.0	<0.002	0	0	<13.33	<0.0045
04/07/02	TTW-02376	D	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/07/02	TTW-02377	D-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02378	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02379	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02380	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02381	F	2452	Air	<7.0	<0.001	0	0	<16.00	<0.0025
04/07/02	TTW-02382	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02383	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02384	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/07/02	TTW-02385	L	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042

No Sample submitted for Location S, due to pump fault
Sample for Location F, ran for over 20 hours.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-04-08-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/11/02**
Sampling Date and Time: **4/8/02 1200 to 2400**

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/08/02	TTW-02387	O	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
04/08/02	TTW-02388	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/08/02	TTW-02389	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/08/02	TTW-02390	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/08/02	TTW-02391	V	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/08/02	TTW-02392	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/08/02	TTW-02393	D	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/08/02	TTW-02394	C	1476	Air	7.64	0.002	0	0	<16.00	<0.0042
04/08/02	TTW-02395	C-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/08/02	TTW-02396	B	1440	Air	8.28	0.002	0	0	<16.00	<0.0043
04/08/02	TTW-02397	A	1440	Air	12.74	0.003	0	0	<16.00	<0.0043
04/08/02	TTW-02398	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/08/02	TTW-02399	J	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/08/02	TTW-02400	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/08/02	TTW-02402	M1	1123.4	Air	<7.0	<0.002	0	0	<13.33	<0.0046
04/08/02	TTW-02403	L	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/08/02	TTW-02386	W	1440	Air	10.19	0.003	***1	***1	32	0.0086

No Sample submitted for Location N-Dup due to pump fault.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/12/2002**
Sampling Date and Time: **4/9/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/09/02	FB040902	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/09/02	TB040902	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/09/02	TTW-02404	W	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02405	Q	1584	Air	<7.0	<0.002	0	0	<20.00	<0.0049
04/09/02	TTW-02406	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02407	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02408	S-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02409	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/09/02	TTW-02410	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02411	K	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/09/02	TTW-02412	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02413	C	541.2	Air	<7.0	<0.005	0	0	<8.00	<0.0057
04/09/02	TTW-02414	C-Dup	1440	Air	12.1	0.003	0	0	< 16.00	<0.0043
04/09/02	TTW-02415	B	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/09/02	TTW-02416	A	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02417	F	1440	Air	7.01	0.002	***1	0	16	0.0043
04/09/02	TTW-02418	J	1512	Air	8.92	0.002	0	0	<16.00	<0.0041
04/09/02	TTW-02419	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02420	M1	1272	Air	<7.0	<0.002	***1	0	16	0.0048
04/09/02	TTW-02421	L	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-09-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/6/02 0647 to 2257

Data Validation Date: 04/10/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/06/02	LF03884	P-1	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/06/02	LF03885	P-2	943.50	Air	<7.0	<0.003	0	0	<11.25	<0.0046
04/06/02	LF03886	P-3	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/06/02	LF03887	P-4	1004.70	Air	<7.0	<0.003	0	0	<13.12	<0.0050
04/06/02	LF03888	P-5	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/06/02	LF03889	P-6	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/06/02	LF03890	P-7	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/06/02	LF03891	P-8	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/06/02	LF03892	W-12A	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/06/02	LF03893	W-12B	1296.00	Air	<7.0	<0.002	***3	***1	52.49	0.0156
04/06/02	LF03894	B-13	1247.40	Air	<7.0	<0.002	0	0	<13.12	<0.0040
04/06/02	LF03895	B-14	1296.00	Air	<7.0	<0.002	***2	0	26.25	0.0078
04/06/02	LF03896	T-15	1296.00	Air	19.11	0.006	***1	***1	26.25	0.0078
04/06/02	LF03897	T-16	1224.00	Air	<7.0	<0.002	***1	0	13.12	0.0041
04/06/02	LF03898	O-17	1144.80	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/06/02	LF03900	O-18	1296.00	Air	<7.0	<0.002	0	0	<13.12	<0.0039
04/06/02	LF03901	O-19	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
04/06/02	LF03902	MPHS-20	1074.40	Air	<7.0	<0.003	***3	***1	52.49	0.0188
04/06/02	LF03903	P-1 Dup	1016.60	Air	<7.0	<0.003	***2	*****1	39.37	0.0149
04/06/02	LF03904	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/06/02	LF03905	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-04-06-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/8/02 0830 to 4/9/02 0545

Data Validation Date: 04/10/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
04/08/02	LF03927	P-1	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/08/02	LF03928	P-2	1357.20	Air	7.64	0.002	0	0	<15.75	<0.0045
04/08/02	LF03929	P-3	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/08/02	LF03930	P-4	1548.00	Air	<7.0	<0.002	0	0	<19.69	<0.0049
04/08/02	LF03931	P-5	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
04/08/02	LF03932	P-6	1512.00	Air	<7.0	<0.002	0	0	<15.75	<0.0040
04/08/02	LF03933	P-7	243.95	Air	<7.0	<0.011	0	0	<7.87	<0.0124
04/08/02	LF03934	P-8	1512.00	Air	<7.0	<0.002	0	0	<15.75	<0.0040
04/08/02	LF03935	W-12A	1296.00	Air	49.68	0.015	0	0	<15.75	<0.0047
04/08/02	LF03936	W-12B	1512.00	Air	<7.0	<0.002	0	0	<15.75	<0.0040
04/08/02	LF03937	B-13	1512.00	Air	<7.0	<0.002	0	0	<15.75	<0.0040
04/08/02	LF03938	B-14	1132.20	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/08/02	LF03939	T-15	1296.00	Air	15.29	0.005	0	0	<15.75	<0.0047
04/08/02	LF03940	T-16	1224.00	Air	26.75	0.008	0	0	<15.75	<0.0050
04/08/02	LF03941	O-17	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/08/02	LF03942	O-18	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/08/02	LF03943	O-19	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/08/02	LF03944	MPHS-20	2664.90	Air	<7.0	<0.001	0	0	<19.69	<0.0028
04/08/02	LF03945	P-7 Dup	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
04/08/02	LF03946	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/08/02	LF03947	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Note: Sample for Location MPHS-20 ran for over 21 hours

Key:

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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-04-08-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 4/3/02 1200 to 2400

Data Validation Date: 4/12/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S-f/cc**
04/03/02	7093-18-0188	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	7093-19-0188	Chambers Street	1272	Air	<7.0	<0.002	0	0	<16.00	<0.0048
04/03/02	7093-15-0186	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	7094-09-0174	P.S. 154 (Bronx)	1232	Air	<7.0	<0.002	0	0	<16.00	<0.0050
04/03/02	7096-12-0182	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/03/02	7095-98-0182	P.S. 274 (Brooklyn)	1160	Air	<7.0	<0.002	0	0	<13.33	<0.0044
04/03/02	7097-18-0179	P.S. 44 (S I)	760	Air	<7.0	<0.004	0	0	<8.00	<0.0041

Key:

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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: **4/5/02** **1200 to 2400**

Data Validation Date: 4/12/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/05/02	7093-18-0190	Park Row	1402	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/05/02	7093-19-0190	Chambers Street	1354	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/05/02	7093-15-0188	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	7094-09-0176	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/05/02	7096-12-0184	P.S. 199 (Queens)	1366	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/05/02	7095-98-0184	P.S. 274 (Brooklyn)	1016	Air	<7.0	<0.003	0	0	<11.43	<0.0043
04/05/02	7097-18-0181	P.S. 44 (S I)	706	Air	<7.0	<0.004	0	0	<8.89	<0.0048

Key:
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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 4/6/02 1200 to 2400

Data Validation Date: 4/12/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
04/06/02	7093-18-0191	Park Row	1226	Air	<7.0	<0.002	0	0	<13.33	<0.0042
04/06/02	7093-19-0191	Chambers Street	1440	Air	<7.0	<0.002	0	0	<20.00	<0.0053
04/06/02	7093-15-0189	I.S. 143 Manhattan	1358	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/06/02	7094-09-0177	P.S. 154 (Bronx)	1378	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/06/02	7096-12-0185	P.S. 199 (Queens)	1256	Air	<7.0	<0.002	0	0	<16.00	<0.0049
04/06/02	7095-98-0185	P.S. 274 (Brooklyn)	1340	Air	<7.0	<0.002	0	0	<16.00	<0.0046
04/06/02	7097-18-0182	P.S. 44 (S I)	1294	Air	<7.0	<0.002	0	0	<16.00	<0.0048

Key:

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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-04-06-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 4/8/02 1200 to 2400

Data Validation Date: 4/14/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S-f/cc**
04/08/02	7093-18-0193	Park Row	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/08/02	7093-19-0193	Chambers Street	1164	Air	<7.0	<0.002	0	0	<15.75	<0.0052
04/08/02	7093-15-0191	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/08/02	7094-09-0179	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<13.12	<0.0035
04/08/02	7096-12-0187	P.S. 199 (Queens)	1314	Air	<7.0	<0.002	0	0	<15.75	<0.0046
04/08/02	7095-98-0187	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/08/02	7097-18-0184	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042

Key:

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**** Chrysotile
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Bulk Sampling Results for WTC NYC
Sampling Date : 4/6/02

				PLM by ELAP 198.1		
Sampling Date	**Sample No.**	**Sampling Location**	**Matrix**	**Asbestos % Type**	**% Fibrous**	**% Non-Fibrous**
04/06/02	Bulk-00050	South Projection Area	Soil	None Detected	20.00% Cellulose	80.00% Other (Non Fibrous)
04/06/02	Bulk-00051	South Projection Area	Soil	None Detected	25.00% Cellulose	75.00% Other (Non Fibrous)
04/06/02	Bulk-00052	South Projection Area	Soil	None Detected	30.00% Cellulose	70.00% Other (Non Fibrous)
04/06/02	Bulk-00053	South Projection Area	Soil	None Detected	25.00% Cellulose	75.00% Other (Non Fibrous)
04/06/02	Bulk-00054	South Projection Area	Soil	None Detected	25.00% Cellulose	75.00% Other (Non Fibrous)
04/06/02	Bulk-00055	South Projection Area	Soil	2.00% Amosite	20.00% Cellulose	78.00% Other (Non Fibrous)
04/06/02	Bulk-00056	South Projection Area	Soil	None Detected	80.00% Min. Wool	20.00% Other (Non Fibrous)
04/06/02	Bulk-00057	South Projection Area	Soil	None Detected	80.0% Min. Wool 1.0 % Cellulose	19.00% Other (Non Fibrous)
04/06/02	Bulk-00058	South Projection Area	Soil	None Detected	80.0% Min. Wool 1.0 % Cellulose	19.00% Other (Non Fibrous)
04/06/02	Bulk-00059	South Projection Area	Soil	None Detected	70.00% Glass	30.00% Other (Non Fibrous)

Polarized Light Microscopy (PLM) - Point Count by ELAP method 198.1

Bulk4-6-02.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 12, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	880	07:20	10	00:00:30	1	0.0	0.1	49.7	170.6
3	74.198685	40.570054	D075	1	880	07:20	10	00:00:30	1	0.0	0.1	52.4	272.7
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	880	07:20	10	00:00:30	1	0.0	0.1	20.2	573.1
6	74.207406	40.563818	D088	1	880	07:20	10	00:00:30	1	0.0	0.1	42.7	161.1
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D065	1	880	07:20	10	00:00:30	1	0.0	0.1	63.6	473.5

Note: Due to afternoon showers DataRams did not run a full 8 hours.

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 11, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D088	1	968	08:04	10	00:00:30	1	0.0	0.1	19.9	573.6
3	74.198685	40.570054	D074	1	----	-----	10	00:00:30	1	0.0	0.1	----	----
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D075	1	942	07:51	10	00:00:30	1	0.0	0.1	13.9	628.0
6	74.207406	40.563818	D065	1	972	08:06	10	00:00:30	1	0.0	0.1	51.6	701.6
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D089	1	974	08:07	10	00:00:30	1	0.0	0.1	18.1	155.6

Note: Due to equipment failure there was no data logged for perimeter location 3.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 15, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0646	0650	0644
Stop Time	1443	1448	1442
Run Time (minutes)	477	478	478
Maximum Concentration (ug/m^3)	121.97	69.95	59.05
Average Concentration (ug/m^3)	35.27	29.77	27.03

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 12, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0632	0635	0630
Stop Time	1441	1423	1449
Run Time (minutes)	489	468	499
Maximum Concentration (ug/m^3)	103.58	74.82	102.68
Average Concentration (ug/m^3)	60.46	55.73	53.62

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 13, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0649	0655	0646
Stop Time	1506	1503	1508
Run Time (minutes)	497	488	502
Maximum Concentration (ug/m^3)	138.50	127.06	99.34
Average Concentration (ug/m^3)	45.14	43.34	38.43

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 14, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0631	0638	0628
Stop Time	1448	1445	1451
Run Time (minutes)	497	487	503
Maximum Concentration (ug/m^3)	97.77	86.44	124.43
Average Concentration (ug/m^3)	28.60	28.72	26.58

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 11, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0647	0646	0650
Stop Time	1504	1503	1507
Run Time (minutes)	497	497	497
Maximum Concentration (ug/m^3)	49.75	43.34	45.94
Average Concentration (ug/m^3)	13.36	21.64	27.41

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/15/02

File Name	NYC1546	NYC1547	NYC1548	NYC1549	NYC1551	NYC1550
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07723	A07724	A07725	A07726
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	32	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/14/02

File Name	NYC1538	NYC1539	NYC1540	NYC1541	NYC1543	NYC1542
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07719	A07720	A07721	A07722
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/13/02

File Name	NYC1530	NYC1531	NYC1532	NYC1533	NYC1535	NYC1534
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07715	A07716	A07717	A07718
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
O-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/12/02

File Name	NYC1522	NYC1523	NYC1524	NYC1525	NYC1527	NYC1526
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07711	A07712	A07713	A07714
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$	ppb$_v$
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethene	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/11/02

File Name	NYC1514	NYC1515	NYC1516	NYC1517	NYC1519	NYC1518
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07707	A07708	A07709	A07710
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Wednesday, April 17, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 5:15 p.m. on April 17

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 108 samples taken in and around ground zero from April 9 through April 12. EPA also sampled for asbestos at two additional lower Manhattan locations on April 9. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 8,126, with 21 samples above the standard (11 of these were collected prior to September 30; the other 10 were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9, March 29, March 30 and April 2).

Air Sampling for Particulates - EPA collected samples on April 16 and April 17 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for Dioxin - A total of 10 samples were collected on March 27 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Air Sampling for Metals - A total of 10 samples were collected on January 22 at various locations in Lower Manhattan. Metals in all samples were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.

Air Sampling for PCB's - A total of 10 samples were collected on March 19 at several locations in Lower Manhattan. PCB's were not detected.

Air Sampling for PAH's - A total of 30 samples were collected on March 21, 27, and 29 at several locations in Lower Manhattan. PAH's were not detected.

Air Sampling for Silicates - A total of 20 samples were collected on April 2 and April 4 at several locations in Lower Manhattan. Silicates were either not detected, or were below the NIOSH Recommended Exposure Limit (REL) time-weighted average of 0.05 mg/m^3.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted on April 16 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on April 16 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 38 samples were collected on April 10, 11 and 12. All samples were below the school re-entry standard.

Air Sampling for Particulates - There were no significant readings from samples collected on April 16.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on on April 9 at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 199 (3290 48th St., Queens), P.S. 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn) and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Wednesday, April 17, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Apr 3, 0001 - 1200 hrs)

Results pending.

NYC / ER (Apr 6, 1200 - 2400 hrs)

Results pending.

NYC / ER (Apr 7, 1200 - 2400 hrs)

Results pending.

NYC / ER (Apr 9, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 10, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 10, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 11, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 11, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 12, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Apr 7)

Results pending.

Fresh Kills (Apr 9)

Results pending.

Fresh Kills (Apr 10, 0740 hrs - Apr 11, 0719 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: except for one sample (Location P-5) this sampling period represents April 10.

Fresh Kills (Apr 11, 0745 hrs - Apr 12, 0451 hrs)

All 19 samples analyzed were below the TEM AHERA standard.
Note: except for two samples (Locations B-14 and MPHS-20) this sampling period represents April 11.

Fresh Kills (Apr 15) - Particulate Monitoring (Dataram)

Particulate measurements were not taken due to weather conditions.

Fresh Kills (Apr 16) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-3, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (March 27) - Dioxin

All 10 samples collected were below the EPA Removal Action level guideline (based on a 30-year exposure).
Note: Dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.

NYC / ER (Jan 22) - Metals

10 samples collected.
All other metals were either not detected or were below applicable EPA Removal Action level guidelines, OSHA PELs, and the NAAQS for lead.
Note: Elevated levels of lead identified in the quality control (QC) samples (blanks) indicate that lead is not present in the samples collected at Locations P and R at levels sufficiently above those in the control samples to be considered valid results.

NYC / ER (Mar 21) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Mar 27) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Mar 29) - PAHs

All 10 samples analyzed did not detect any PAHs.

NYC / ER (Mar 19) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Apr 2) - Silicates

All 10 samples analyzed did not detect any silicates.

NYC / ER (Apr 4) - Silicates

All 10 samples either did not detect any silicates or were below the NIOSH Recommended Exposure Limit (REL) TWA of 0.05 mg/m^3.

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 4) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 7) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 9) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:

- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 16) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA. Instruments operated approximately 8 hours.
Station L had an average of 49.78 ug/m^3 with a maximum reading of 80.52 ug/m^3.
Station N had an average of 50.79 ug/m^3 with a maximum reading of 94.34 ug/m^3.
Station R had an average of 52.59 ug/m^3 with a maximum reading of 109.75 ug/m^3.

NYC / ER (Apr 17) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA. Instruments operated approximately 8 hours.
Station L had an average of 76.27 ug/m^3 with a maximum reading of 1,476.48 ug/m^3.
Station N had an average of 77.21 ug/m^3 with a maximum reading of 184.54 ug/m^3.
Station R had an average of 97.15 ug/m^3 with a maximum reading of 38.34 ug/m^3.

NYC / ER (Apr 16) - Volatile Organics (Mobile Laboratory)

Aside from one volatile organic compound detected at the South Tower, no other volatiles were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/9/02 1200 to 2400

Data Validation Date: 04/13/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
04/09/02	TTW-02422	Q	1440	Air	10.83	0.003	***1	0	16	0.0043
04/09/02	TTW-02423	W	1332	Air	10.19	0.003	0	0	<16.00	<0.0046
04/09/02	TTW-02424	E	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/09/02	TTW-02425	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02426	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02427	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02428	K	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/09/02	TTW-02429	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02430	C	1512	Air	7.64	0.002	0	0	<16.00	<0.0041
04/09/02	TTW-02431	B	1404	Air	12.1	0.003	0	0	<16.00	<0.0044
04/09/02	TTW-02432	A	1440	Air	12.74	0.003	0	0	<16.00	<0.0043
04/09/02	TTW-02433	A-Dup	1404	Air	11.46	0.003	0	0	<16.00	<0.0044
04/09/02	TTW-02434	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02435	F-Dup.	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02436	J	1440	Air	8.28	0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02437	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/09/02	TTW-02438	M1	1318.2	Air	7.64	0.002	0	0	<16.00	<0.0047
04/09/02	TTW-02439	L	1440	Air	8.92	0.002	0	0	<16.00	<0.0043

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C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-04-09-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/13/2002**
Sampling Date and Time: **4/10/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/10/02	FB041002	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/10/02	TB041002	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/10/02	TTW-02440	W	1404	Air	12.74	0.003	***2	***1	48	0.0132
04/10/02	TTW-02441	Q	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/10/02	TTW-02442	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	TTW-02443	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	TTW-02444	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	TTW-02445	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	TTW-02446	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	TTW-02447	D	1440	Air	8.92	0.002	0	***1	16	0.0043
04/10/02	TTW-02448	C	1440	Air	15.29	0.004	0	0	<16.00	<0.0043
04/10/02	TTW-02449	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/10/02	TTW-02450	B-Dup	1440	Air	10.19	0.003	0	0	<16.00	<0.0043
04/10/02	TTW-02451	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	TTW-02452	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	TTW-02453	J	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/10/02	TTW-02454	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/10/02	TTW-02455	M1	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/10/02	TTW-02456	M1-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	TTW-02457	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

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G: Church and Duane St.
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
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U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-10-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/10/02 1200 to 2400

Data Validation Date: 04/14/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
04/10/02	TTW-02458	W	1404	Air	17.83	0.005	0	0	<15.75	<0.0043
04/10/02	TTW-02459	Q	1404	Air	8.92	0.002	0	0	<15.75	<0.0043
04/10/02	TTW-02460	E	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/10/02	TTW-02461	S	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/10/02	TTW-02462	U	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/10/02	TTW-02463	V	1476	Air	<7.0	<0.002	0	0	<15.75	<0.0041
04/10/02	TTW-02464	K	1404	Air	<7.0	<0.002	0	0	<15.75	<0.0043
04/10/02	TTW-02465	D	1476	Air	<7.0	<0.002	0	0	<15.75	<0.0041
04/10/02	TTW-02466	C	1476	Air	<7.0	<0.002	0	0	<15.75	<0.0041
04/10/02	TTW-02467	B	1476	Air	<7.0	<0.002	***1	***1	31.5	0.0082
04/10/02	TTW-02468	A	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/10/02	TTW-02469	F	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/10/02	TTW-02470	J	1548	Air	<7.0	<0.002	0	0	<15.75	<0.0039
04/10/02	TTW-02471	J-Dup	1152	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/10/02	TTW-02472	N	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/10/02	TTW-02473	M1	1310	Air	<7.0	<0.002	0	0	<15.75	<0.0046
04/10/02	TTW-02474	L	1476	Air	<7.0	<0.002	0	0	<15.75	<0.0041
04/10/02	TTW-02475	L-Dup	1548	Air	<7.0	<0.002	0	0	<15.75	<0.0039

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-04-10-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/14/2002**
Sampling Date and Time: **4/11/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S-f/cc**
04/11/02	FB041102	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/11/02	TB041102	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/11/02	TTW-02476	W	1440	Air	17.83	0.005	0	0	<15.75	<0.0042
04/11/02	TTW-02477	Q	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/11/02	TTW-02478	Q-Dup	1404	Air	<7.0	<0.002	0	0	<15.75	<0.0043
04/11/02	TTW-02479	E	1512	Air	<7.0	<0.002	0	0	<15.75	<0.0040
04/11/02	TTW-02480	E-Dup	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/11/02	TTW-02481	S	1404	Air	<7.0	<0.002	0	0	<15.75	<0.0043
04/11/02	TTW-02482	U	1476	Air	<7.0	<0.002	0	0	<15.75	<0.0041
04/11/02	TTW-02483	V	1302	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/11/02	TTW-02484	K	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/11/02	TTW-02485	D	1404	Air	<7.0	<0.002	0	0	<15.75	<0.0043
04/11/02	TTW-02486	C	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/11/02	TTW-02487	B	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/11/02	TTW-02488	A	1476	Air	11.46	0.003	0	0	<15.75	<0.0041
04/11/02	TTW-02489	F	1476	Air	<7.0	<0.002	0	0	<15.75	<0.0041
04/11/02	TTW-02490	J	1332	Air	<7.0	<0.002	0	0	<15.75	<0.0046
04/11/02	TTW-02491	N	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/11/02	TTW-02492	M1	1476	Air	<7.0	<0.002	0	0	<15.75	<0.0041
04/11/02	TTW-02493	L	1512	Air	<7.0	<0.002	0	0	<15.75	<0.0040

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-11-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/14/02**
Sampling Date and Time: 4/11/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
04/11/02	TTW-02494	W	1476	Air	26.75	0.007	***4	0	64	0.0167
04/11/02	TTW-02495	Q	1440	Air	11.46	0.003	0	0	<16.00	<0.0043
04/11/02	TTW-02496	E	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/11/02	TTW-02497	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/11/02	TTW-02498	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/11/02	TTW-02499	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/11/02	TTW-02500	K	1121.35	Air	7.64	0.003	0	0	<13.33	<0.0046
04/11/02	TTW-02501	D	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
04/11/02	TTW-02502	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/11/02	TTW-02503	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/11/02	TTW-02504	B-Dup	1440	Air	8.28	0.002	0	0	<16.00	<0.0043
04/11/02	TTW-02505	A	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/11/02	TTW-02506	A-Dup	1440	Air	10.19	0.003	0	0	<16.00	<0.0043
04/11/02	TTW-02507	F	1226	Air	<7.0	<0.002	0	0	<13.33	<0.0042
04/11/02	TTW-02508	J	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/11/02	TTW-02509	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/11/02	TTW-02510	M1	1226.4	Air	<7.0	<0.002	0	0	<13.33	<0.0042
04/11/02	TTW-02511	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

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F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/14/2002**
Sampling Date and Time: **4/12/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
04/12/02	FB041202	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/12/02	TB041202	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/12/02	TTW-02512	W	1368	Air	20.38	0.006	0	0	<16.00	<0.0045
04/12/02	TTW-02513	Q	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/12/02	TTW-02514	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02515	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02516	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/12/02	TTW-02517	U-Dup	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/12/02	TTW-02518	V	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/12/02	TTW-02519	V-Dup	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/12/02	TTW-02520	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02521	D	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/12/02	TTW-02522	C	1440	Air	7.54	0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02523	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02524	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02525	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02526	J	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/12/02	TTW-02527	N	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/12/02	TTW-02528	M1	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/12/02	TTW-02529	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-04-12-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/10/02 0740 to 4/11/02 0719 **Data Validation Date: 04/13/2002**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm²	f/cc	0.5µ - 5µ	5µ	S/mm²	S~f/cc**
04/10/02	LF03969	P-1	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/10/02	LF03970	P-2	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
04/10/02	LF03971	P-3	1332.00	Air	<7.0	<0.002	***1	0	15.75	0.0046
04/10/02	LF03972	P-4	1512.00	Air	<7.0	<0.002	0	0	<15.75	<0.0040
04/10/02	LF03973	P-5	2588.00	Air	<7.0	<0.001	0	0	<19.69	<0.0029
04/10/02	LF03974	P-6	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/10/02	LF03975	P-7	1512.00	Air	<7.0	<0.002	0	0	<15.75	<0.0040
04/10/02	LF03976	P-8	1158.85	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/10/02	LF03977	W-12A	1296.00	Air	42.04	0.012	***1	***1	31.5	0.0094
04/10/02	LF03978	W-12B	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/10/02	LF03979	B-13	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/10/02	LF03980	B-14	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/10/02	LF03981	T-15	1296.00	Air	30.57	0.009	0	0	<15.75	<0.0047
04/10/02	LF03982	T-16	1296.00	Air	30.57	0.009	0	0	<15.75	<0.0047
04/10/02	LF03983	O-17	1224.00	Air	<7.0	<0.002	0	0	<15.75	<0.0050
04/10/02	LF03984	O-18	1169.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/10/02	LF03985	O-19	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/10/02	LF03986	MPHS-20	1260.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
04/10/02	LF03987	W-12A Dup	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/10/02	LF03988	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/10/02	LF03989	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Please note that Sample # P-5 Ran for over 21 hours.

Key:

* Some sample volume (liters) are below recommended limit for the TEM method: volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-04-10-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/11/02 0745 to 4/12/02 0451

Data Validation Date: 04/14/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S-f/cc**
04/11/02	LF03990	P-1	1404.00	Air	<7.0	<0.002	0	0	<15.75	<0.0043
04/11/02	LF03991	P-2	1134.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/11/02	LF03992	P-3	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/11/02	LF03993	P-4	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/11/02	LF03994	P-5	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/11/02	LF03995	P-6	1048.25	Air	<7.0	<0.003	0	0	<13.12	<0.0048
04/11/02	LF03996	P-7	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/11/02	LF03997	P-8	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/11/02	LF03998	W-12A	1152.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/11/02	LF03999	W-12B	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/11/02	LF04000	B-13	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/11/02	LF04001	B-14	2053.80	Air	<7.0	<0.001	0	0	<15.75	<0.0030
04/11/02	LF04002	T-15	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/11/02	LF04003	T-16	1440.00	Air	20.38	0.005	0	0	<15.75	<0.0042
04/11/02	LF04004	O-17	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/11/02	LF04005	O-18	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/11/02	LF04006	O-19	1152.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/11/02	LF04007	MPHS-20	2278.80	Air	<7.0	<0.001	0	0	<15.75	<0.0027
04/11/02	LF04008	P-8 Dup	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/11/02	LF04009	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/11/02	LF04010	Trip Blank	0.00	Air	<7.0	n/a	NA(3)	NA(3)	NA(2)	NA(2)

Please note that Sample for Location MHHS-20 Ran for over 21 hours.
Please note that Sample for Location B-14 Ran for over 19 hours.

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-04-11-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 4/9/02 1200 to 2309

Data Validation Date: 4/14/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S-f/cc**
04/09/02	7093-18-0194	Park Row	1300	Air	<7.0	<0.002	0	0	<16.00	<0.0047
04/09/02	7093-19-0194	Chambers Street	1240	Air	11.46	0.004	0	0	<13.33	<0.0041
04/09/02	7093-15-0192	I.S. 143 Manhattan	1116	Air	<7.0	<0.002	0	0	<13.33	<0.0046
04/09/02	7094-09-0180	P.S. 154 (Bronx)	1310	Air	<7.0	<0.002	0	0	<16.00	<0.0047
04/09/02	7096-12-0188	P.S. 199 (Queens)	1338	Air	<7.0	<0.002	0	0	<16.00	<0.0046
04/09/02	7095-98-0188	P.S. 274 (Brooklyn)	1052	Air	7.64	0.003	0	0	<13.33	<0.0049
04/09/02	7097-18-0185	P.S. 44 (S I)	872	Air	<7.0	<0.003	0	0	<8.89	<0.0039

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-04-09-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 4/9/02 1200 to 2309

Data Validation Date: 4/14/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
04/09/02	7093-18-0194	Park Row	1300	Air	<7.0	<0.002	0	0	<16.00	<0.0047
04/09/02	7093-19-0194	Chambers Street	1240	Air	11.46	0.004	0	0	<13.33	<0.0041
04/09/02	7093-15-0192	I.S. 143 Manhattan	1116	Air	<7.0	<0.002	0	0	<13.33	<0.0046
04/09/02	7094-09-0180	P.S. 154 (Bronx)	1310	Air	<7.0	<0.002	0	0	<16.00	<0.0047
04/09/02	7096-12-0188	P.S. 199 (Queens)	1338	Air	<7.0	<0.002	0	0	<16.00	<0.0046
04/09/02	7095-98-0188	P.S. 274 (Brooklyn)	1052	Air	7.64	0.003	0	0	<13.33	<0.0049
04/09/02	7097-18-0185	P.S. 44 (S I)	872	Air	<7.0	<0.003	0	0	<8.89	<0.0039

Key:

*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-04-09-02.xls

The following table is a summary of the air sampling data inside the three buildings to date. Sampling done on 11-29-01, 12-17-01, and 1-22-02 was done by the Nassau County Health Department. All other samples were taken by US EPA. Samples after 1-21-02 reflect conditions in Tutor Time after the air quality improvement measures were operating. ND denotes "non-detect" and indicates that the compound was not detected at the analytical detection limit in that sample. NS denotes "No Sample" and indicates that a sample was not taken in that location. Two results in one cell indicate that duplicate samples were taken in that location for quality control purposes. Additionally, not every compound was analyzed for during every sampling date. Therefore, some compounds are reported for multiple dates, while others for only one date.

	tetrachloroethylene (PCE)					bromoform		napthalene	1,2-dichloroethane		dichlorobenzene		ethyl benzene	xylene
	11-29-01	12-17-01	01-22-02	01-24-02	02-14-02	01-24-02	02-14-02	02-14-02	01-24-02	02-14-02	01-24-02	02-14-02	02-14-02	02-14-02
Infant Care Room	NS	91	21	20.7 / 13.3	21.4 / 16.5	ND	ND	ND	33.1	ND / 33.7	ND	ND	ND	ND
Infant Care Room / Newborn	NS	90	28	9.9	18.0 B	ND	ND	ND	39.1	ND	ND	ND	ND	ND
Toddler Classroom	NS	130	16 / 16	7.1	11.5	ND	ND	ND	52.4	33.6	ND	ND	ND	33.6
Playground	60	150	18	7.0 / 7.5	16.7 / 15.7 B	ND	ND	ND	32.46 / ND	33.8 / 34.2	ND	67.5 / ND	16.9 / ND	110 / 85.6
Learning Center	81	230*	27	10.8	18.9	ND	ND	ND	ND	41.3	ND	99.1	ND	ND
Pookies Café	78	260	28	11.1 / 9.6	17.7 B / 17.5	ND	ND	143.0 / 106.0	ND	42.0 / 40.7	ND	143.0 / ND	ND	ND
Twaddler Classroom	NS	NS	32 / 32	13.0	21.2	ND	ND	ND	ND	34.8	ND	130.4	ND	ND
Learning Center (Northwest Room)	49	66 / 63	14	8.6	9.9 B	ND	ND	133.8	ND	ND	ND	164.7	ND	ND
Learning Village	NS	90	21	NS	13.8	NS	ND	71.2	NS	23.7	NS	134.4	ND	ND
Learning Center (Southwest Room)	NS	64 / 67	21 / 21	13.9	14.3 B	246.93	ND	176.7	ND	ND	ND	160.6	ND	ND
Reception Area	NS	NS	NS	NS	11.3 B	NS	ND	101.1	NS	31.1	NS	124.4	ND	ND
Laundry / Utility Room	NS	46*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
South Side of the Bldg. (Outdoor)	NS	NS	NS	2.0 B	2.9 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
North Side of the Bldg. (Outdoor)	5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Shooters Billiards Parlor	NS	NS	NS	169	NS	ND	NS	NS	ND	NS	ND	NS	NS	NS
Shooters Billiards Parlor	NS	NS	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sanders & Sanders	NS	NS	NS	NS	19.8 B	NS	ND	126.8	NS	48.8	NS	107.3	ND	ND
Ian McGregors - Kitchen	NS	18/18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ian McGregors - Under Bar Floor Drain	NS	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

*Results suspicious as the badge was not properly sealed.

B - Possible breakthrough or migration

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/19/02

Sample No.	WG-7167-1P		06799		06800		06801		06802		06803		06804	
Sampling Location	Method Blank		R		E		P		S		S		D	
Sample Volume (L)	0		7200		7080		7470		7290		9720		6015	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of MoCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of DiCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of TrCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of TeCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of PeCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of HxCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of HpCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of OcCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Sum of NoCBs	U	10.0	U	1.39	U	1.41	U	1.34	U	1.37	U	1.03	U	1.66
Total	0		0		0		0		0		0		0	

COC# 03/19/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 4/10/02

3-19-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/19/02

Sample No.	06805		06806		06807		06808		06809		06810	
Sampling Location	C		B		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	6315		6315		6945		6375		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DeCB	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of MoCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of DiCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of TrCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of TeCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of PeCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of HxCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of HpCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of OcCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Sum of NoCBs	U	1.58	U	1.58	U	1.44	U	1.57	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 03/19/02-Dioxin

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/21/02

Sample No.	06913		06914		06915		06916		06917	
Sampling Location	Location R		Location E		Location P		Location S		Location S	
Volume (L)	803.7		795.6		838.5		887.25		910.65	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.8	U	1.8	U	1.7	U	1.6	U	1.6
2-Methylnaphthalene	U	1.6	U	1.6	U	1.5	U	1.5	U	1.4
1-Methylnaphthalene	U	1.6	U	1.6	U	1.5	U	1.5	U	1.4
Biphenyl	U	1.5	U	1.5	U	1.4	U	1.3	U	1.3
2,6-Dimethylnaphthalene	U	1.5	U	1.5	U	1.4	U	1.3	U	1.3
Acenaphthylene	U	1.5	U	1.5	U	1.4	U	1.4	U	1.3
Acenaphthene	U	1.5	U	1.5	U	1.4	U	1.3	U	1.3
Dibenzofuran	U	1.4	U	1.4	U	1.3	U	1.2	U	1.2
Fluorene	U	1.4	U	1.4	U	1.3	U	1.2	U	1.2
Phenanthrene	U	1.3	U	1.3	U	1.2	U	1.2	U	1.1
Anthracene	U	1.3	U	1.3	U	1.2	U	1.2	U	1.1
Carbazole	U	1.4	U	1.4	U	1.3	U	1.2	U	1.2
Fluoranthene	U	1.1	U	1.1	U	1.1	U	1.0	U	1.0
Pyrene	U	1.1	U	1.1	U	1.1	U	1.0	U	1.0
Benzo[a]anthracene	U	1.0	U	1.0	U	0.96	U	0.91	U	0.88
Chrysene	U	1.0	U	1.0	U	0.96	U	0.91	U	0.88
Benzo[b]fluoranthene	U	0.91	U	0.91	U	0.87	U	0.82	U	0.80
Benzo[k]fluoranthene	U	0.91	U	0.91	U	0.87	U	0.82	U	0.80
Benzo[e]pyrene	U	0.91	U	0.91	U	0.87	U	0.82	U	0.80
Benzo[a]pyrene	U	0.91	U	0.91	U	0.87	U	0.82	U	0.80
Indeno(1,2,3-c,d)pyrene	U	0.83	U	0.84	U	0.79	U	0.75	U	0.73
Dibenzo[a,h]anthracene	U	0.82	U	0.83	U	0.79	U	0.74	U	0.72
Benzo[g,h,i]perylene	U	0.83	U	0.84	U	0.79	U	0.75	U	0.73

COC: 03/21/02-PAHs ERT: 4/10/02

U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-21-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/21/02										
Sample No.	06918		06919		06920		06921		06922	
Sampling Location	Location D		Location C		Location B		Location 3A		Location A	
Volume (L)	750.75		886.78		924		779		783.48	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.9	U	1.6	U	1.6	U	1.8	U	1.8
2-Methylnaphthalene	U	1.7	U	1.5	U	1.4	U	1.7	U	1.6
1-Methylnaphthalene	U	1.7	U	1.5	U	1.4	U	1.7	U	1.6
Biphenyl	U	1.6	U	1.3	U	1.3	U	1.5	U	1.5
2,6-Dimethylnaphthalene	U	1.6	U	1.3	U	1.3	U	1.5	U	1.5
Acenaphthylene	U	1.6	U	1.4	U	1.3	U	1.5	U	1.5
Acenaphthene	U	1.6	U	1.3	U	1.3	U	1.5	U	1.5
Dibenzofuran	U	1.5	U	1.2	U	1.2	U	1.4	U	1.4
Fluorene	U	1.5	U	1.2	U	1.2	U	1.4	U	1.4
Phenanthrene	U	1.4	U	1.2	U	1.1	U	1.3	U	1.3
Anthracene	U	1.4	U	1.2	U	1.1	U	1.3	U	1.3
Carbazole	U	1.5	U	1.2	U	1.2	U	1.4	U	1.4
Fluoranthene	U	1.2	U	1.0	U	0.98	U	1.2	U	1.2
Pyrene	U	1.2	U	1.0	U	0.98	U	1.2	U	1.2
Benzo[a]anthracene	U	1.1	U	0.91	U	0.87	U	1.0	U	1.0
Chrysene	U	1.1	U	0.91	U	0.87	U	1.0	U	1.0
Benzo[b]fluoranthene	U	0.97	U	0.82	U	0.79	U	0.93	U	0.93
Benzo[k]fluoranthene	U	0.97	U	0.82	U	0.79	U	0.93	U	0.93
Benzo[e]pyrene	U	0.97	U	0.82	U	0.79	U	0.93	U	0.93
Benzo[a]pyrene	U	0.97	U	0.82	U	0.79	U	0.93	U	0.93
Indeno(1,2,3-c,d)pyrene	U	0.89	U	0.75	U	0.72	U	0.85	U	0.85
Dibenzo[a,h]anthracene	U	0.88	U	0.74	U	0.71	U	0.85	U	0.84
Benzo[g,h,i]perylene	U	0.89	U	0.75	U	0.72	U	0.85	U	0.85

COC: 03/21/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-21-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in A
WA# 0-236: WTC ER Site

Date Sampled 03/21/02				
Sample No.	06923		06924	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/21/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-21-02PAH.xls

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 04/2/02

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
4/2/02	TTWS-0190	A	1000	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0189	3A	1000	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0188	B	1000	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0187	B	990	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0186	C	1000	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0185	D	1000	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0182	E	1000	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0184	P	1000	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0183	S	1000	Air	<0.01	<0.02	<0.02
4/2/02	TTWS-0181	R	950	Air	<0.01	<0.02	<0.02

c# 04/2/02-TTSilica

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

NS: Not sampled

ERT 4/09/02

NIOSH 7500: Silica crystalline by XRD

FL-04-2-02silica.xls

Table 1.0 Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06724		06724		06724		06273		06263		06264	
Location		Lot Blank 1		Lot Blank 2		Lot Blank 3		Field Blank		Location R		Location A	
Air Volume (L)								0		5050		4360	
Date Collected		01/22/02		01/22/02		01/22/02		01/22/02		01/22/02		01/22/02	
Parameter	Analysis Method	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/filter	MDL µg/filter	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	1.3	0.60	1.1	0.60	1.1	0.60	U	0.60	U	0.12	U	0.15
Antimony	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	0.019	0.015	U	0.017
Arsenic	AA-Fur	U	0.032	U	0.032	U	0.032	U	0.032	U	0.006	U	0.007
Barium	ICAP	U	0.32	U	0.32	U	0.32	U	0.32	U	0.062	U	0.072
Beryllium	ICAP	U	0.049	U	0.049	U	0.049	U	0.049	U	0.010	U	0.011
Cadmium	ICAP	0.020	0.016	U	0.016	U	0.016	U	0.016	U	0.003	U	0.004
Calcium	ICAP	6.6	3.5	U	3.5	3.6	3.5	U	3.5	U	0.69	5.5	0.76
Chromium	ICAP	1.7	0.042	0.92	0.042	0.55	0.042	U	0.042	U	0.008	U	0.009
Cobalt	ICAP	U	0.034	U	0.034	U	0.034	U	0.034	U	0.007	U	0.008
Copper	ICAP	U	0.44	U	0.44	U	0.44	U	0.44	U	0.086	0.10	0.10
Iron	ICAP	0.99	0.90	U	0.90	U	0.90	U	0.90	U	0.18	4.5	0.19
Lead	AA-Fur	0.11	0.010	U	0.009	U	0.009	U	0.009	0.004	0.002	0.041	0.002
Magnesium	ICAP	U	3.3	U	3.3	U	3.3	U	3.3	U	0.66	1.0	0.71
Manganese	ICAP	U	0.078	U	0.078	U	0.078	U	0.078	U	0.015	0.061	0.020
Nickel	ICAP	U	0.058	U	0.058	U	0.058	U	0.058	U	0.011	U	0.013
Potassium	ICAP	U	3.7	U	3.7	U	3.7	U	3.7	U	0.73	U	0.84
Selenium	AA-Fur	U	0.075	U	0.075	U	0.075	U	0.075	U	0.015	U	0.017
Silver	ICAP	U	0.025	U	0.025	U	0.025	U	0.025	U	0.005	U	0.006
Sodium	ICAP	13	3.7	13	3.7	16	3.7	U	3.7	U	0.73	U	0.79
Thallium	AA-Fur	U	0.034	U	0.034	U	0.034	U	0.034	U	0.007	U	0.008
Vanadium	ICAP	U	0.037	0.037	0.037	0.067	0.037	U	0.037	U	0.008	U	0.008
Zinc	ICAP	U	0.079	U	0.079	U	0.079	U	0.079	U	0.20	U	0.22

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.1 (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06265		06266		06267		06268		06269		06270	
Location		Location 3A		Location 3A		LOC B CHURCH & DEY ST		C -LIBERTY ST. & CHURCH ST.		D-GREENWICH & ALBANY ST.		P-ALBANY ST. & SOUTH END AVE	
Air Volume (L)		4370		4540		4140		4760		4740		4010	
Date Collected		01/22/02		01/22/02		01/22/02		01/22/02		01/22/02		01/22/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.14	U	0.13	U	0.15	U	0.13	U	0.13	U	0.15
Antimony	AA-Fur	U	0.017	U	0.017	U	0.018	U	0.016	U	0.016	U	0.019
Arsenic	AA-Fur	0.009	0.007	0.014	0.007	U	0.008	U	0.007	U	0.007	U	0.008
Barium	ICAP	U	0.072	U	0.069	U	0.076	U	0.066	U	0.070	U	0.079
Beryllium	ICAP	U	0.011	U	0.011	U	0.012	U	0.011	U	0.011	U	0.012
Cadmium	ICAP	U	0.004	U	0.004	U	0.004	U	0.003	U	0.003	U	0.004
Calcium	ICAP	5.0	0.80	U	0.77	5.6	0.85	4.4	0.74	U	0.74	5.6	0.87
Chromium	ICAP	U	0.010	U	0.010	U	0.010	U	0.009	U	0.009	U	0.010
Cobalt	ICAP	U	0.008	U	0.007	U	0.008	U	0.007	U	0.007	U	0.008
Copper	ICAP	U	0.10	U	0.10	U	0.11	U	0.093	U	0.093	U	0.11
Iron	ICAP	9.2	0.21	8.8	0.20	4.7	0.22	4.3	0.19	1.9	0.19	2.2	0.22
Lead	AA-Fur	0.015	0.002	0.036	0.002	0.047	0.002	0.021	0.002	0.090	0.002	0.013	0.002
Magnesium	ICAP	U	0.76	U	0.73	U	0.8	U	0.70	U	0.70	2.1	0.83
Manganese	ICAP	0.10	0.020	0.091	0.020	0.078	0.020	0.058	0.016	0.025	0.016	0.046	0.019
Nickel	ICAP	U	0.010	U	0.01	U	0.01	U	0.012	U	0.012	U	0.014
Potassium	ICAP	U	0.84	U	0.81	U	0.89	U	0.77	U	0.78	U	0.92
Selenium	AA-Fur	U	0.017	U	0.017	U	0.018	U	0.016	U	0.016	U	0.019
Silver	ICAP	U	0.006	U	0.006	U	0.006	U	0.005	U	0.005	U	0.006
Sodium	ICAP	U	0.84	U	0.81	U	0.89	U	0.77	U	0.78	U	0.92
Thallium	AA-Fur	U	0.008	U	0.008	U	0.008	U	0.007	U	0.007	U	0.009
Vanadium	ICAP	U	0.010	U	0.008	U	0.009	U	0.008	U	0.008	U	0.009
Zinc	ICAP	U	0.23	U	0.22	U	0.25	U	0.21	U	0.017	U	0.25

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

Table 1.x (cont.) Results of the Analysis for Metals in Air
WA # 0-236 New York (WTC) ER site

Client ID		06271		06272	
Location		S-RECTOR PLACE & SOUTH END AVE		E-LIBERTY ST. & SOUTH END AVE	
Air Volume (L)		4800		4170	
Date Collected		01/22/02		01/22/02	
Parameter	Analysis Method	Conc µg/m³	MDL µg/m³	Conc µg/m³	MDL µg/m³
Aluminum	ICAP	U	0.13	U	0.14
Antimony	AA-Fur	U	0.016	U	0.018
Arsenic	AA-Fur	U	0.007	U	0.008
Barium	ICAP	U	0.066	U	0.076
Beryllium	ICAP	U	0.010	U	0.012
Cadmium	ICAP	U	0.003	U	0.004
Calcium	ICAP	U	0.73	U	0.84
Chromium	ICAP	U	0.009	U	0.010
Cobalt	ICAP	U	0.007	U	0.008
Copper	ICAP	U	0.092	U	0.11
Iron	ICAP	U	0.19	U	0.22
Lead	AA-Fur	U	0.002	U	0.002
Magnesium	ICAP	U	0.69	U	0.79
Manganese	ICAP	U	0.016	U	0.019
Nickel	ICAP	U	0.012	U	0.014
Potassium	ICAP	U	0.77	U	0.88
Selenium	AA-Fur	U	0.016	U	0.018
Silver	ICAP	U	0.005	U	0.006
Sodium	ICAP	U	0.77	U	0.88
Thallium	AA-Fur	U	0.007	U	0.008
Vanadium	ICAP	U	0.008	U	0.009
Zinc	ICAP	U	0.017	U	0.24

MDL denotes Method Detection Limit
U denotes less than the MDL (not detected)
Average Media Blank concentration subtracted from all sample results

NYC Emergency Response
Silica- Air Sampling Results at Fixed Locations
Sampling Date and Time: 04/4/02

Sampling Date	Sample No.	Sampling Location	Sample Volume Liters	Matrix	Quartz mg/m^3	Cristobalite mg/m^3	Tridymite mg/m^3
4/4/02	TTWS-0202	A	1000	Air	<0.01	<0.02	<0.02
4/4/02	TTWS-0201	3A	980	Air	<0.01	<0.02	<0.02
4/4/02	TTWS-0200	B	1000	Air	0.01 J	<0.02	<0.02
4/4/02	TTWS-0199	B	1000	Air	<0.01	<0.02	<0.02
4/4/02	TTWS-0198	C	990	Air	<0.01	<0.02	<0.02
4/4/02	TTWS-0197	D	990	Air	<0.01	<0.02	<0.02
4/4/02	TTWS-0194	E	1000	Air	<0.01	<0.02	<0.02
4/4/02	TTWS-0195	P	1000	Air	<0.01	<0.02	<0.02
4/4/02	TTWS-0196	S	980	Air	<0.01	<0.02	<0.02
4/4/02	TTWS-0193	R	1000	Air	<0.01	<0.02	<0.02

rc# 04/4/02-TTSilica

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
3B Church & Vesey
3A Between WTC4 & WTC 5

NS: Not sampled

ERT 4/12/02

NIOSH 7500: Silica crystalline by XRD

FL-04-4-02silica.xls

The following table is a summary of the air sampling data inside the four buildings to date. Sampling done on 11-29-01, 12-17-01, and 1-22-02 was done by the Nassau County Health Department. All other samples were taken by US EPA. Samples after 1-21-02 reflect conditions in Tutor Time after the air quality improvement measures were operating. ND denotes "non-detect" and indicates that the compound was not detected at the analytical detection limit in that sample. NS denotes "No Sample" and indicates that a sample was not taken in that location. Two results in one cell indicate that duplicate samples were taken in that location for quality control purposes. Additionally, not every compound was analyzed for during every sampling date. Therefore, some compounds are reported for multiple dates, while others for only one date.

	tetrachloroethylene (PCE)					bromoform		napthalene	1,2-dichloroethane		dichlorobenzene		ethyl benzene	xylene
	11-29-01	12-17-01	01-22-02	01-24-02	02-14-02	01-24-02	02-14-02	02-14-02	01-24-02	02-14-02	01-24-02	02-14-02	02-14-02	02-14-02
Infant Care Room	NS	91	21	20.7 / 13.3	21.4 / 16.5	ND	ND	ND	33.1	ND / 33.7	ND	ND	ND	ND
Infant Care Room / Newborn	NS	90	28	9.9	18.0 B	ND	ND	ND	39.1	ND	ND	ND	ND	ND
Toddler Classroom	NS	130	16 / 16	7.1	11.5	ND	ND	ND	52.4	33.6	ND	ND	ND	33.6
Playground	60	150	18	7.0 / 7.5	16.7 / 15.7 B	ND	ND	ND	32.46 / ND	33.8 / 34.2	ND	67.5 / ND	16.9 / ND	110 / 85.6
Learning Center	81	230*	27	10.8	18.9	ND	ND	ND	ND	41.3	ND	99.1	ND	ND
Pookies Café	78	260	28	11.1 / 9.6	17.7 B / 17.5	ND	ND	143.0 / 106.0	ND	42.0 / 40.7	ND	143.0 / ND	ND	ND
Twaddler Classroom	NS	NS	32 / 32	13.0	21.2	ND	ND	ND	ND	34.8	ND	130.4	ND	ND
Learning Center (Northwest Room)	49	66 / 63	14	8.6	9.9 B	ND	ND	133.8	ND	ND	ND	164.7	ND	ND
Learning Village	NS	90	21	NS	13.8	NS	ND	71.2	NS	23.7	NS	134.4	ND	ND
Learning Center (Southwest Room)	NS	64 / 67	21 / 21	13.9	14.3 B	246.93	ND	176.7	ND	ND	ND	160.6	ND	ND
Reception Area	NS	NS	NS	NS	11.3 B	NS	ND	101.1	NS	31.1	NS	124.4	ND	ND
Laundry / Utility Room	NS	46*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
South Side of the Bldg. (Outdoor)	NS	NS	NS	2.0 B	2.9 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
North Side of the Bldg. (Outdoor)	5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Shooters Billiards Parlor	NS	NS	NS	169	NS	ND	NS	NS	ND	NS	ND	NS	NS	NS
Shooters Billiards Parlor	NS	NS	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sanders & Sanders	NS	NS	NS	NS	19.8 B	NS	ND	126.8	NS	48.8	NS	107.3	ND	ND
Ian McGregors - Kitchen	NS	18/18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ian McGregors - Under Bar Floor Drain	NS	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

*Results suspicious as the badge was not properly sealed.

B - Possible breakthrough or migration

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/29/02										
Sample No.	06937		06938		06939		06940		06941	
Sampling Location	Location R		Location R		Location E		Location P		Location S	
Volume (L)	892.7		842.4		849.25		760.38		872.95	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.6	U	1.7	U	1.7	U	1.9	U	1.6
2-Methylnaphthalene	U	1.4	U	1.5	U	1.5	U	1.7	U	1.5
1-Methylnaphthalene	U	1.4	U	1.5	U	1.5	U	1.7	U	1.5
Biphenyl	U	1.3	U	1.4	U	1.4	U	1.6	U	1.4
2,6-Dimethylnaphthalene	U	1.3	U	1.4	U	1.4	U	1.5	U	1.3
Acenaphthylene	U	1.4	U	1.4	U	1.4	U	1.6	U	1.4
Acenaphthene	U	1.3	U	1.4	U	1.4	U	1.6	U	1.4
Dibenzofuran	U	1.2	U	1.3	U	1.3	U	1.4	U	1.3
Fluorene	U	1.2	U	1.3	U	1.3	U	1.5	U	1.3
Phenanthrene	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2
Anthracene	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2
Carbazole	U	1.2	U	1.3	U	1.3	U	1.4	U	1.3
Fluoranthene	U	1.0	U	1.1	U	1.1	U	1.2	U	1.0
Pyrene	U	1.0	U	1.1	U	1.1	U	1.2	U	1.0
Benzo[a]anthracene	U	0.90	U	0.95	U	0.95	U	1.1	U	0.92
Chrysene	U	0.90	U	0.95	U	0.95	U	1.1	U	0.92
Benzo[b]fluoranthene	U	0.82	U	0.86	U	0.86	U	0.96	U	0.83
Benzo[k]fluoranthene	U	0.82	U	0.86	U	0.86	U	0.96	U	0.83
Benzo[e]pyrene	U	0.82	U	0.86	U	0.86	U	0.96	U	0.83
Benzo[a]pyrene	U	0.82	U	0.86	U	0.86	U	0.96	U	0.83
Indeno(1,2,3-c,d)pyrene	U	0.74	U	0.79	U	0.78	U	0.87	U	0.76
Dibenzo[a,h]anthracene	U	0.74	U	0.78	U	0.78	U	0.87	U	0.76
Benzo[g,h,i]perylene	U	0.74	U	0.79	U	0.78	U	0.87	U	0.76

COC: 03/29/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-29-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/29/02										
Sample No.	06942		06943		06944		06945		06946	
Sampling Location	Location D		Location C		Location B		Location 3A		Location A	
Volume (L)	865.05		906.53		784.08		894.68		853.2	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.7	U	1.6	U	1.8	U	1.6	U	1.7
2-Methylnaphthalene	U	1.5	U	1.4	U	1.6	U	1.4	U	1.5
1-Methylnaphthalene	U	1.5	U	1.4	U	1.6	U	1.4	U	1.5
Biphenyl	U	1.4	U	1.3	U	1.5	U	1.3	U	1.4
2,6-Dimethylnaphthalene	U	1.4	U	1.3	U	1.5	U	1.3	U	1.4
Acenaphthylene	U	1.4	U	1.3	U	1.5	U	1.3	U	1.4
Acenaphthene	U	1.4	U	1.3	U	1.5	U	1.3	U	1.4
Dibenzofuran	U	1.3	U	1.2	U	1.4	U	1.2	U	1.3
Fluorene	U	1.3	U	1.2	U	1.4	U	1.2	U	1.3
Phenanthrene	U	1.2	U	1.1	U	1.3	U	1.2	U	1.2
Anthracene	U	1.2	U	1.1	U	1.3	U	1.2	U	1.2
Carbazole	U	1.3	U	1.2	U	1.4	U	1.2	U	1.3
Fluoranthene	U	1.1	U	1.0	U	1.2	U	1.0	U	1.1
Pyrene	U	1.1	U	1.0	U	1.2	U	1.0	U	1.1
Benzo[a]anthracene	U	0.93	U	0.89	U	1.0	U	0.90	U	0.94
Chrysene	U	0.93	U	0.89	U	1.0	U	0.90	U	0.94
Benzo[b]fluoranthene	U	0.84	U	0.80	U	0.93	U	0.81	U	0.85
Benzo[k]fluoranthene	U	0.84	U	0.80	U	0.93	U	0.81	U	0.85
Benzo[e]pyrene	U	0.84	U	0.80	U	0.93	U	0.81	U	0.85
Benzo[a]pyrene	U	0.84	U	0.80	U	0.93	U	0.81	U	0.85
Indeno(1,2,3-c,d)pyrene	U	0.77	U	0.73	U	0.85	U	0.74	U	0.78
Dibenzo[a,h]anthracene	U	0.76	U	0.73	U	0.84	U	0.74	U	0.77
Benzo[g,h,i]perylene	U	0.77	U	0.73	U	0.85	U	0.74	U	0.78

COC: 03/29/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-29-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/29/02				
Sample No.	06947		06948	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/29/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-29-02PAH.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/27/02

Sample No.	WG7195-C1			06832			06831			06830			06829			06828			06827		
Sampling Location	Method Blank			Location A			Location 3A			B-Church & Dey St			C-Liberty St. & Church St.			D Greenwich & Albany St.			Location S		
Volume (Liters)	0			6600			5535			7260			7605			5190			6390		
Analyte	Result ng	EMPC ng	MDL ng	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³
2378-TCDD	U		0.020	U		0.0030	U		0.0036	U		0.0026	U		0.0026	U		0.0039	U		0.0031
12378-PeCDD	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
123478-HxCDD	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
123678-HxCDD	U		0.10	U	0.0020	0.015	0.0020 J		0.018	U	0.0019	0.014	U		0.013	U	0.0026	0.019	U		0.016
123789-HxCDD	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
1234678-HpCDD	U		0.10	U		0.015	U		0.018	U		0.014	U	0.0004	0.013	U		0.019	U		0.016
OCDD	0.0446 J		0.20	U		0.030	U		0.036	U		0.028	U		0.026	U		0.039	U		0.031
2378-TCDF	U		0.020	U		0.0030	U		0.0036	U		0.0026	U		0.0026	U		0.0039	U		0.0031
12378-PeCDF	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
23478-PeCDF	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
123478-HxCDF	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
123678-HxCDF	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
234678-HxCDF	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
123789-HxCDF	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
1234678-HpCDF	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
1234789-HpCDF	U		0.10	U		0.015	U		0.018	U		0.014	U		0.013	U		0.019	U		0.016
OCDF	U		0.20	U		0.030	U		0.036	U		0.028	U		0.026	U		0.039	U		0.031
Total TCDDs	U			U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U			U		
Total HxCDDs	U			U			0.0020			U			U			U			U		
Total HpCDDs	U			U			U			U			U			U			0.0037		
Total TCDFs	U			U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			U			U			U		
Total HxCDFs	U			U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U			U		
Total Adjusted Conc																					
TEQ (ND=0)	0.0000			0.0000			0.0002			0.0000			0.0000			0.0000			0.0001		
TEQ (ND=1/2)	0.0419			0.0020			0.0025			0.0019			0.0023			0.0028			0.0024		

OOC# 03/27/02 dioxin
B= Not detected due to blank contamination
EMPC: Estimated Maximum Possible Concentration
TEQ: Toxicity Equivalent
NA Not Analyzed . Sample not received by the laboratory
The TEQ (ND=1/2) is calculated using 1/2 of the estimated detection limit for U (non detect) values.

ERTC 4/09/02

03-27-02dioxrev.xls

NYC Emergency Response
Air Samples - dioxin and furan results
Sampling Date 3/27/02

Sample No.	06826			06825			06824			06823			06833			06834		
Sampling Location	Location P			Location E			R- TAGA			R- TAGA			Field Blank			Lot Blank		
Volume (Liters)	7485			5880			5775			5385			0			0		
Analyte	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng/m³	EMPC ng/m³	MDL ng/m³	Result ng	EMPC ng	MDL ng	Result ng	EMPC ng	MDL ng
2378-TCDD	U		0.0027	U		0.0034	U		0.0035	U		0.0028	U		0.020	U		0.020
12378-PeCDD	U		0.013	U		0.017	U		0.017	U		0.014	U		0.10	U		0.10
123478-HxCDD	U		0.013	U		0.017	U		0.017	U		0.014	U		0.10	U		0.10
123678-HxCDD	U	0.0021	0.013	U	0.0024	0.017	U		0.017	U	0.0035	0.014	U	0.0168	0.10	U	0.0146	0.10
123789-HxCDD	U		0.013	U		0.017	U		0.017	U		0.014	U		0.10	U		0.10
1234678-HpCDD	U		0.013	U		0.017	U		0.017	U		0.014	U	0.0098	0.10	0.0968 J		0.10
OCDD	U		0.027	U		0.034	U		0.035	U		0.028	U		0.20	0.0439 J		0.20
2378-TCDF	U		0.0027	U		0.0034	U		0.0035	U		0.0028	U		0.020	U		0.020
12378-PeCDF	U		0.013	U		0.017	U		0.017	U		0.014	0.0042 J		0.10	U		0.10
23478-PeCDF	U		0.013	U		0.017	U		0.017	U		0.014	U		0.10	U		0.10
123478-HxCDF	U		0.013	U		0.017	U		0.017	U		0.014	U	0.0018	0.10	U		0.10
123678-HxCDF	U		0.013	U		0.017	U		0.017	U		0.014	U	0.0038	0.10	U		0.10
234678-HxCDF	U		0.013	U		0.017	U		0.017	U		0.014	U		0.10	U		0.10
123789-HxCDF	U		0.013	U		0.017	U		0.017	U		0.014	U		0.10	U		0.10
1234678-HpCDF	U		0.013	U		0.017	U		0.017	U		0.014	U		0.10	U		0.10
1234789-HpCDF	U		0.013	U		0.017	U		0.017	U		0.014	U		0.10	U		0.10
OCDF	U		0.027	U		0.034	U		0.035	U		0.028	U		0.20	U		0.20
Total TCDDs	U			U			U			U			U			U		
Total PeCDDs	U			U			U			U			U			U		
Total HxCDDs	U			U			U			U			U			U		
Total HpCDDs	U			U			U			U			0.0067			0.0068		
Total TCDFs	U			U			U			U			U			U		
Total PeCDFs	U			U			U			U			0.0042			U		
Total HxCDFs	U			U			U			U			U			U		
Total HpCDFs	U			U			U			U			U			U		
Total Adjusted Conc																		
TEQ (ND=0)	0.0000			0.0000			0.0000			0.0000			0.0000			0.0001		
TEQ (ND=1/2)	0.0020			0.0030			0.0024			0.0026			0.0401			0.0400		

COC# 03/27/02 dioxin

03-27-02dioxinrev.xls

Table 1.1 Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/27/02										
Sample No.	06925		06926		06927		06928		06929	
Sampling Location	Location R		Location R		Location E		Location P		Location S	
Volume (L)	791.98		914.43		726		810		1001.25	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	1.8	U	1.6	U	2.0	U	1.8	U	1.4
2-Methylnaphthalene	U	1.6	U	1.4	U	1.8	U	1.6	U	1.3
1-Methylnaphthalene	U	1.6	U	1.4	U	1.8	U	1.6	U	1.3
Biphenyl	U	1.5	U	1.3	U	1.6	U	1.5	U	1.2
2,6-Dimethylnaphthalene	U	1.5	U	1.3	U	1.6	U	1.5	U	1.2
Acenaphthylene	U	1.5	U	1.3	U	1.7	U	1.5	U	1.2
Acenaphthene	U	1.5	U	1.3	U	1.6	U	1.5	U	1.2
Dibenzofuran	U	1.4	U	1.2	U	1.5	U	1.3	U	1.1
Fluorene	U	1.4	U	1.2	U	1.5	U	1.4	U	1.1
Phenanthrene	U	1.3	U	1.1	U	1.4	U	1.3	U	1.0
Anthracene	U	1.3	U	1.1	U	1.4	U	1.3	U	1.0
Carbazole	U	1.4	U	1.2	U	1.5	U	1.4	U	1.1
Fluoranthene	U	1.1	U	1.0	U	1.3	U	1.1	U	0.91
Pyrene	U	1.1	U	1.0	U	1.3	U	1.1	U	0.91
Benzo[a]anthracene	U	1.0	U	0.88	U	1.1	U	0.99	U	0.80
Chrysene	U	1.0	U	0.88	U	1.1	U	0.99	U	0.80
Benzo[b]fluoranthene	U	0.92	U	0.80	U	1.0	U	0.90	U	0.73
Benzo[k]fluoranthene	U	0.92	U	0.80	U	1.0	U	0.90	U	0.73
Benzo[e]pyrene	U	0.92	U	0.80	U	1.0	U	0.90	U	0.73
Benzo[a]pyrene	U	0.92	U	0.80	U	1.0	U	0.90	U	0.73
Indeno(1,2,3-c,d)pyrene	U	0.84	U	0.73	U	0.92	U	0.82	U	0.66
Dibenzo[a,h]anthracene	U	0.83	U	0.72	U	0.91	U	0.81	U	0.66
Benzo[g,h,i]perylene	U	0.84	U	0.73	U	0.92	U	0.82	U	0.66

COC: 03/27/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-27-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/27/02										
Sample No.	06930		06931		06932		06933		06934	
Sampling Location	Location D		Location C		Location B		Location 3A		Location A	
Volume (L)	638.75		600		572		521.5		864	
Compound Name	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv	Conc ppbv	MDL ppbv
Naphthalene	U	2.2	U	2.4	U	2.5	U	2.7	U	1.7
2-Methylnaphthalene	U	2.0	U	2.2	U	2.3	U	2.5	U	1.5
1-Methylnaphthalene	U	2.0	U	2.2	U	2.3	U	2.5	U	1.5
Biphenyl	U	1.9	U	2.0	U	2.1	U	2.3	U	1.4
2,6-Dimethylnaphthalene	U	1.8	U	2.0	U	2.1	U	2.3	U	1.4
Acenaphthylene	U	1.9	U	2.0	U	2.1	U	2.3	U	1.4
Acenaphthene	U	1.9	U	2.0	U	2.1	U	2.3	U	1.4
Dibenzofuran	U	1.7	U	1.8	U	1.9	U	2.1	U	1.3
Fluorene	U	1.7	U	1.8	U	1.9	U	2.1	U	1.3
Phenanthrene	U	1.6	U	1.7	U	1.8	U	2.0	U	1.2
Anthracene	U	1.6	U	1.7	U	1.8	U	2.0	U	1.2
Carbazole	U	1.7	U	1.8	U	1.9	U	2.1	U	1.3
Fluoranthene	U	1.4	U	1.5	U	1.6	U	1.7	U	1.1
Pyrene	U	1.4	U	1.5	U	1.6	U	1.7	U	1.1
Benzo[a]anthracene	U	1.3	U	1.3	U	1.4	U	1.5	U	0.93
Chrysene	U	1.3	U	1.3	U	1.4	U	1.5	U	0.93
Benzo[b]fluoranthene	U	1.1	U	1.2	U	1.3	U	1.4	U	0.84
Benzo[k]fluoranthene	U	1.1	U	1.2	U	1.3	U	1.4	U	0.84
Benzo[e]pyrene	U	1.1	U	1.2	U	1.3	U	1.4	U	0.84
Benzo[a]pyrene	U	1.1	U	1.2	U	1.3	U	1.4	U	0.84
Indeno(1,2,3-c,d)pyrene	U	1.0	U	1.1	U	1.2	U	1.3	U	0.77
Dibenzo[a,h]anthracene	U	1.0	U	1.1	U	1.2	U	1.3	U	0.76
Benzo[g,h,i]perylene	U	1.0	U	1.1	U	1.2	U	1.3	U	0.77

COC: 03/27/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-27-02PAH.xls

Table 1.1(Cont.) Results of the Analysis for PAH in Air
WA# 0-236: WTC ER Site

Date Sampled 03/27/02				
Sample No.	06935		06936	
Sampling Location	Field Blank		Lot Blank	
Volume (L)	0		0	
Compound Name	Conc ug	MDL ug	Conc ug	MDL ug
Naphthalene	U	7.5	U	7.5
2-Methylnaphthalene	U	7.5	U	7.5
1-Methylnaphthalene	U	7.5	U	7.5
Biphenyl	U	7.5	U	7.5
2,6-Dimethylnaphthalene	U	7.5	U	7.5
Acenaphthylene	U	7.5	U	7.5
Acenaphthene	U	7.5	U	7.5
Dibenzofuran	U	7.5	U	7.5
Fluorene	U	7.5	U	7.5
Phenanthrene	U	7.5	U	7.5
Anthracene	U	7.5	U	7.5
Carbazole	U	7.5	U	7.5
Fluoranthene	U	7.5	U	7.5
Pyrene	U	7.5	U	7.5
Benzo[a]anthracene	U	7.5	U	7.5
Chrysene	U	7.5	U	7.5
Benzo[b]fluoranthene	U	7.5	U	7.5
Benzo[k]fluoranthene	U	7.5	U	7.5
Benzo[e]pyrene	U	7.5	U	7.5
Benzo[a]pyrene	U	7.5	U	7.5
Indeno(1,2,3-c,d)pyrene	U	7.5	U	7.5
Dibenzo[a,h]anthracene	U	7.5	U	7.5
Benzo[g,h,i]perylene	U	7.5	U	7.5

COC: 03/27/02-PAHs
U: Denotes not detected
J: Denotes value is estimated
UJ: Denotes MDL is estimated

03-27-02PAH.xls

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 16, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	1004	08:22	10	00:00:30	1	0.0	0.1	77.0	433.8
3	74.198685	40.570054	D075	1	1002	08:21	10	00:00:30	1	0.0	0.1	45.5	407.9
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	----	-----	10	00:00:30	1	0.0	0.1	----	----
6	74.207406	40.563818	D065	1	1002	08:21	10	00:00:30	1	0.0	0.1	37.5	319.1
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D088	1	1002	08:21	10	00:00:30	1	0.0	0.1	38.4	3307.7

Note: Due to equipment failure the logged data for perimeter location 5 was determined to be invalid and therefore not reported.

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 16, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0641	0645	0639
Stop Time	1444	1448	1443
Run Time (minutes)	483	483	484
Maximum Concentration (ug/m^3)	80.52	94.34	109.75
Average Concentration (ug/m^3)	49.78	50.79	52.59

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 17, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0627	0631	0625
Stop Time	1423	1426	1422
Run Time (minutes)	476	475	477
Maximum Concentration (ug/m^3)	1,476.48	184.54	97.15
Average Concentration (ug/m^3)	76.27	77.21	38.34

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/16/02

File Name	NYC1554	NYC1555	NYC1556	NYC1557	NYC1559	NYC1558
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07727	A07728	A07729	A07730
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	180
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Thursday, April 18, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:15 p.m. on April 18

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 35 samples taken in and around ground zero on April 6 and April 7. EPA also sampled for asbestos at two additional lower Manhattan locations on April 4. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 8,163, with 21 samples above the standard (11 of these were collected prior to September 30; the other 10 were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9, March 29, March 30 and April 2).

Air Sampling for Dioxin - A total of 11 samples were collected from March 4 through March 18 from several locations in Lower Manhattan. All samples collected were below the EPA Removal Action guidelines (based on a 30-year exposure).

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted on April 17 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on April 17 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Particulates - There were no significant readings from samples collected on April 17.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on on April 4 at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 199 (3290 48th St., Queens), P.S. 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn) and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Thursday, April 18, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Apr 3, 0001 - 1200 hrs)

Results pending.

NYC / ER (Apr 6, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 7, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location L) was not collected due to an equipment malfunction.

Landfill Ambient Air Sampling Locations

Fresh Kills (Apr 7)

Results pending.

Fresh Kills (Apr 9)

Results pending.

Fresh Kills (Apr 17) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Mar 4 - Mar 18) - Dioxin (EPA-ORD)

Eleven (11) 72-hour samples were collected during this period at Park Row (4 samples), Chambers St./West St. (3 samples), and Albany St. (4 samples) at roof top locations.
None of the samples collected were above the EPA Removal Action guideline (based on a 30-year exposure).
Note: The analytical results for all of these samples indicate that dioxin is not present in these air samples at levels sufficiently above those in the control samples to be considered a valid result.
Data is not attached.

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 4) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:

- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 7) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 17) - Volatile Organics (Mobile Laboratory)

Numerous volatile organic compounds were detected at the South Tower in a sample collected from the ground surface of the ongoing excavation activities. Two volatile organic compounds were identified in samples collected at the North Tower and Austin Tobin Plaza.

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/10/02**
Sampling Date and Time: **4/7/02 1200 to 2400**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
01/00/00	TTW-02350	W	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02351	Q	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02352	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02353	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/07/02	TTW-02354	U	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/07/02	TTW-02355	V	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/07/02	TTW-02356	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02357	D	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/07/02	TTW-02358	D-Dup	1238.25	Air	<7.0	<0.002	0	0	<13.33	<0.0041
04/07/02	TTW-02359	C	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/07/02	TTW-02360	B	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02361	A	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/07/02	TTW-02362	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02363	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	TTW-02364	J-Dup	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/07/02	TTW-02365	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/07/02	TTW-02366	M1	1324	Air	<7.0	<0.002	0	0	<16.00	<0.0047

No Sample was submitted for Location L due to flow fault.

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/6/02 1200 to 2400

Data Validation Date: 04/10/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/06/02	TTW-02314	Q	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/06/02	TTW-02315	W	1440	Air	11.46	0.003	0	0	<16.00	<0.0043
04/06/02	TTW-02316	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02317	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/06/02	TTW-02318	U	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02319	V	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/06/02	TTW-02320	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02321	K-Dup	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/06/02	TTW-02322	D	1440	Air	8.92	0.002	0	***1	16	0.0043
04/06/02	TTW-02323	C	1440	Air	10.19	0.003	0	0	<16.00	<0.0043
04/06/02	TTW-02324	B	1440	Air	8.28	0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02325	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02326	A-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02327	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02328	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02329	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02330	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/06/02	TTW-02331	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-06-02-pm rev1.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/11/02**
Sampling Date and Time: 4/4/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/04/02	7093-18-0189	Park Row	1248	Air	<7.0	<0.002	0	0	<13.33	<0.0041
04/04/02	7093-19-0189	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	7093-15-0187	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	7094-09-0175	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	7096-12-0183	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	7095-98-0183	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/04/02	7097-18-0180	P.S. 44 (S I)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 17, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	904	07:32	10	00:00:30	1	0.0	0.1	89.6	1412.5
3	74.198685	40.570054	D075	1	890	07:25	10	00:00:30	1	0.0	0.1	52.2	1232.2
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	904	07:23	10	00:00:30	1	0.0	0.1	42.2	1173.3
6	74.207406	40.563818	D065	1	920	07:32	10	00:00:30	1	0.0	0.1	75.8	4793.7
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D088	1	896	07:28	10	00:00:30	1	0.0	0.1	34.6	1342.6

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/17/02

File Name	NYC1565	NYC1566	NYC1567	NYC1568	NYC1570	NYC1569
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07731	A07732	A07733	A07734
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	**22**
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	**26**	**28**	**42**
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	**30**	RL	**110**
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	**25**
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	**57**
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	**38**
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	**50**
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Friday, April 19, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:45 p.m. on April 19

Lower Manhattan:

Air Sampling for Asbestos - EPA analyzed 106 samples taken in and around ground zero from April 12 through April 15. EPA also sampled for asbestos at two additional lower Manhattan locations on April 7, 10 and 11. All samples showed results less than 70 structures per square millimeter, which is the Asbestos Hazard Emergency Response Act (AHERA) standard for allowing children to re-enter school buildings after asbestos removal activities.

This brings the total number of air samples collected and analyzed for asbestos in Lower Manhattan to 8,275, with 21 samples above the standard (11 of these were collected prior to September 30; the other 10 were collected on October 9, November 27, December 27, January 14, February 5, February 11, March 9, March 29, March 30 and April 2).

Air Sampling for Particulates - EPA collected samples on April 18 at Location "L" (northeast side of Stuyvesant High School), Location "N" (south side of Pier 25), and Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for PCB's - A total of 20 samples were collected on March 21 and March 27 at several locations in Lower Manhattan. PCB's were not detected.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted on April 18 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken on April 18 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Asbestos - A total of 38 samples were collected on April 9 and April 12. All samples were below the school re-entry standard.

Air Sampling for Particulates - There were no significant readings from samples collected on April 18.

Elsewhere in New York City:

Air Sampling for Asbestos - Samples were collected on April 7, 10 and 11, at Intermediate School 143 (511 W. 182nd St., Manhattan), Public School 199 (3290 48th St., Queens), P.S. 154 (333 East 135th St., Bronx), P.S. 274 (800 Bushwick Ave, Brooklyn) and P.S. 44 (80 Maple Parkway, Staten Island). None showed exceedances of the AHERA re-entry standard.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Friday, April 19, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Apr 3, 0001 - 1200 hrs)

Results pending.

NYC / ER (Apr 12, 1200 - 2400 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 13, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 13, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location U) was not collected due to an equipment malfunction.

NYC / ER (Apr 14, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

NYC / ER (Apr 14, 1200 - 2400 hrs)

All 17 samples analyzed were below the TEM AHERA standard.
1 sample (Location F) was not analyzed for TEM.

NYC / ER (Apr 15, 0001 - 1200 hrs)

All 18 samples analyzed were below the TEM AHERA standard.

Landfill Ambient Air Sampling Locations

Fresh Kills (Apr 7)

Results pending.

Fresh Kills (Apr 9, 0825 - 2114 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Apr 12, 0650 - 2126 hrs)

All 19 samples analyzed were below the TEM AHERA standard.

Fresh Kills (Apr 13)

Results pending.

Fresh Kills (Apr 14)

Sampling was not conducted since there were no operations at the landfill on this day.

Fresh Kills (Apr 18) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Ambient Air Sampling Locations

NYC / ER (Mar 21) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Mar 27) - PCBs

All 10 samples analyzed did not detect any PCBs.

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 7) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:

- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St. Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 7 samples were collected from these monitoring sites. All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 10 - 11) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Monitoring sites include:

- Park Row (Site 1)
- Chambers St./West St. (Site 2)
- Public School 154: 333 East 135th St, Bronx (Site 5)
- Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
- Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
- Public School 44: 80 Maple Parkway, Staten Island (Site 8)
- Public School 199: 3290 - 48th Ave., Queens (Site 9)

During this period a total of 14 samples were collected from these monitoring sites.
All of the samples were below the TEM AHERA standard.

NYC / ER (Apr 18) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Station L had an average of 28.18 ug/m^3 with a maximum reading of 58.06 ug/m^3.
Station N had an average of 26.85 ug/m^3 with a maximum reading of 73.84 ug/m^3.
Station R had an average of 29.70 ug/m^3 with a maximum reading of 58.03 ug/m^3.

NYC / ER (Apr 18) - Volatile Organics (Mobile Laboratory)

Aside from two volatile organic compounds detected at the North Tower, no other volatiles were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/12/02 1200 to 2400

Data Validation Date: 04/15/02

Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	PCM by NIOSH 7400 f/mm²	PCM by NIOSH 7400 f/cc	TEM (AHERA) Structures (#) 0.5μ - 5μ	TEM (AHERA) Structures (#) 5μ	TEM (AHERA) S/mm²	TEM (AHERA) S~f/cc**
04/12/02	TTW-02530	W	1440	Air	13.38	0.004	0	0	<16.00	<0.0043
04/12/02	TTW-02531	Q	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/12/02	TTW-02532	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02533	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02534	U	405.3	Air	<7.0	<0.007	0	0	<8.00	<0.0076
04/12/02	TTW-02535	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02536	K	1440	Air	<7.0	<0.002	*****1	0	16	0.0043
04/12/02	TTW-02537	D	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/12/02	TTW-02538	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02539	B	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02540	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02541	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/12/02	TTW-02542	F-Dup.	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/12/02	TTW-02543	J	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/12/02	TTW-02544	N	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/12/02	TTW-02545	M1	1194.9	Air	<7.0	<0.002	0	0	<13.33	<0.0043
04/12/02	TTW-02546	M1-Dup	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/12/02	TTW-02547	L	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Actinolite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FL-04-12-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/15/2002**
Sampling Date and Time: **4/13/02 0001 to 1200**

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/13/02	FB041302	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/13/02	TB041302	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/13/02	TTW-02548	W	1404	Air	8.92	0.002	0	0	<16.00	<0.0044
04/13/02	TTW-02549	Q	1368	Air	<7.0	<0.002	***1	***1	32	0.0090
04/13/02	TTW-02550	E	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/13/02	TTW-02551	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02552	S-Dup	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/13/02	TTW-02553	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/13/02	TTW-02554	V	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/13/02	TTW-02555	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02556	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02557	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02558	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/13/02	TTW-02559	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02560	F	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/13/02	TTW-02561	F-Dup	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/13/02	TTW-02562	J	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/13/02	TTW-02563	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02564	M1	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02565	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Sampling Locations:
A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
NA(2) - Not analyzed for TEM
n/a - Not applicable
NR - Not requested
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-13-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations **Data Validation Date: 04/16/02**
Sampling Date and Time: 4/13/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/13/02	TTW-02566	W	1152	Air	<7.0	<0.002	***1	0	13.33	0.0045
04/13/02	TTW-02567	Q	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/13/02	TTW-02568	E	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/13/02	TTW-02569	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02571	V	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/13/02	TTW-02572	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02573	D	1440	Air	<7.0	<0.002	0	*****1	16	0.0043
04/13/02	TTW-02574	C	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/13/02	TTW-02575	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/13/02	TTW-02576	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02577	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02578	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02579	J-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02580	N	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/13/02	TTW-02581	M1	1292	Air	<7.0	<0.002	0	0	<16.00	<0.0048
04/13/02	TTW-02582	L	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
04/13/02	TTW-02583	L-Dup	1368	Air	<7.0	<0.002	***1	0	16	0.0045

No Sample Submitted for Location U due to pump fault.

Sampling Locations:
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C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
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F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball c)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Tremolite
***** Amosite
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/14/02 0001 to 1200

Data Validation Date: 04/16/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/14/02	FB041402	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/14/02	TB041402	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/14/02	TTW-02584	W	1440	Air	<7.0	<0.002	***2	0	32	0.0086
04/14/02	TTW-02585	Q	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/14/02	TTW-02586	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02587	S	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/14/02	TTW-02588	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/14/02	TTW-02589	V	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
04/14/02	TTW-02590	K	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02591	K-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02592	D	1368	Air	7.01	0.002	0	0	<16.00	<0.0045
04/14/02	TTW-02593	D-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02594	C	1440	Air	10.83	0.003	***1	0	16	0.0043
04/14/02	TTW-02595	B	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02596	A	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/14/02	TTW-02597	F	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02598	J	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/14/02	TTW-02599	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02600	M1	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/14/02	TTW-02601	L	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045

Sampling Locations:
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K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
M1 : West St. - 50 yards south of Harrison St. at bulkhead
N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End
T: Pier 6 Heliport
U: Pier 6 Exit 2
V: Pier 6 Bus Sign
W: Wash Tent Common Area

Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-14-02-am.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/14/02 1200 to 2400

Data Validation Date: 04/17/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/14/02	TTW-02602	W	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/14/02	TTW-02603	Q	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/14/02	TTW-02604	Q-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02605	E	1440	Air	7.01	0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02606	E-Dup	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/14/02	TTW-02607	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02608	U	1512	Air	<7.0	<0.002	0	0	<16.00	<0.0041
04/14/02	TTW-02609	V	1404	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/14/02	TTW-02610	K	1440	Air	8.92	0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02611	D	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/14/02	TTW-02612	C	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02613	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/14/02	TTW-02614	A	1440	Air	7.64	0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02615	F	1440	Air	<7.0	<0.002	NA (2)	NA (2)	NA (2)	NA (2)
04/14/02	TTW-02616	J	1440	Air	8.28	0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02617	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/14/02	TTW-02618	M1	1382.55	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/14/02	TTW-02619	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Please note: Sample # TTW-02615 was not analyzed for TEM.

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F: Northern median strip of Vesey & West St
G: Church and Duane St.
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L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
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N: South side of Pier 25 (next to volleyball ct)
P: NE corner of South End Ave. & Albany
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R: TAGA Bus Location
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Key:
* Some Sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
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NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-14-02-pm.xls

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 4/15/02 0001 to 1200

Data Validation Date: 04/17/2002

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
					f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S--f/cc**
04/15/02	FB041502	Field Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/15/02	TB041502	Trip Blank	0	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/15/02	TTW-02620	W	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02621	Q	1368	Air	<7.0	<0.002	0	0	<16.00	<0.0045
04/15/02	TTW-02622	E	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02623	S	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02624	U	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/15/02	TTW-02625	V	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02626	K	1162	Air	<7.0	<0.002	0	0	<13.33	<0.0044
04/15/02	TTW-02627	D	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02628	C	1440	Air	8.28	0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02629	C-Dup	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02630	B	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/15/02	TTW-02631	B-Dup	1476	Air	<7.0	<0.002	0	0	<16.00	<0.0042
04/15/02	TTW-02632	A	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02633	F	1238.2	Air	<7.0	<0.002	0	0	<13.33	<0.0041
04/15/02	TTW-02634	J	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02635	N	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/15/02	TTW-02636	M1	1326.35	Air	<7.0	<0.002	0	0	<16.00	<0.0046
04/15/02	TTW-02637	L	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

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Key:
* Some sample volumes (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
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**** Extremely low sample volume collected
***** Amosite
NA(1) - Not analyzed due to overloading of particulates
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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FL-04-15-02-am.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/12/02 0650 to 2126

Data Validation Date: 04/16/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/12/02	LF04011	P-1	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/12/02	LF04012	P-2	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/12/02	LF04013	P-3	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/12/02	LF04014	P-4	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/12/02	LF04015	P-5	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/12/02	LF04016	P-6	1162.80	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/12/02	LF04017	P-7	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
04/12/02	LF04018	P-8	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/12/02	LF04019	W-12A	1368.00	Air	11.46	0.003	***1	0	15.75	0.0044
04/12/02	LF04020	W-12B	1260.00	Air	<7.0	<0.002	0	0	<13.12	<0.0040
04/12/02	LF04021	B-13	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
04/12/02	LF04022	B-14	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
04/12/02	LF04023	T-15	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/12/02	LF04024	T-16	1296.00	Air	14.01	0.004	0	0	<15.75	<0.0047
04/12/02	LF04025	O-17	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/12/02	LF04026	O-18	1152.00	Air	<7.0	<0.002	0	0	<13.12	<0.0044
04/12/02	LF04027	O-19	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/12/02	LF04028	MPHS-20	1368.00	Air	<7.0	<0.002	0	0	<15.75	<0.0044
04/12/02	LF04029	P-6 Dup	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/12/02	LF04030	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/12/02	LF04031	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

* Some sample volume (liters) are below recommended limit for the TEM method; volume is based on pump reading
** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
NA (1) - Not analyzed due to overloading of particulates
NA (2) - Not analyzed for TEM
NA (3) - Not analyzed due to wet filter
n/a - Not applicable
NC - Sample not collected
NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-04-12-02.xls

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 4/9/02 0825 to 2114

Data Validation Date: 04/14/2002

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/09/02	LF03948	P-1	1224.00	Air	<7.0	<0.002	0	0	<13.12	<0.0041
04/09/02	LF03949	P-2	1116.00	Air	<7.0	<0.002	***1	0	13.12	0.0045
04/09/02	LF03950	P-3	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/09/02	LF03951	P-4	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/09/02	LF03952	P-5	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/09/02	LF03953	P-6	1085.70	Air	<7.0	<0.002	0	0	<13.12	<0.0047
04/09/02	LF03954	P-7	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/09/02	LF03955	P-8	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/09/02	LF03956	W-12A	1404.00	Air	15.29	0.004	0	0	<15.75	<0.0043
04/09/02	LF03957	W-12B	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/09/02	LF03958	B-13	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/09/02	LF03959	B-14	1332.00	Air	<7.0	<0.002	0	0	<15.75	<0.0046
04/09/02	LF03960	T-15	1296.00	Air	7.64	0.002	0	0	<15.75	<0.0047
04/09/02	LF03961	T-16	1296.00	Air	16.56	0.005	0	0	<15.75	<0.0047
04/09/02	LF03962	O-17	1440.00	Air	<7.0	<0.002	0	0	<15.75	<0.0042
04/09/02	LF03963	O-18	1296.00	Air	<7.0	<0.002	0	0	<15.75	<0.0047
04/09/02	LF03964	O-19	1260.00	Air	<7.0	<0.002	0	0	<15.75	<0.0048
04/09/02	LF03965	MPHS-20	1188.00	Air	<7.0	<0.002	0	0	<13.12	<0.0043
04/09/02	LF03966	P-2 Dup	1116.00	Air	<7.0	<0.002	0	0	<13.12	<0.0045
04/09/02	LF03967	Lot Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)
04/09/02	LF03968	Trip Blank	0.00	Air	<7.0	n/a	NA(2)	NA(2)	NA(2)	NA(2)

Key:

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** Structure (S) is roughly equivalent to fiber (f)
*** Chrysotile
**** Actinolite
*****Amosite
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NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

FK-04-9-02.xls

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 4/7/02 1200 to 2400

Data Validation Date: 4/16/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm²	f/cc	0.5μ - 5μ	5μ	S/mm²	S~f/cc**
04/07/02	7093-18-0192	Park Row	1400	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/07/02	7093-19-0192	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	7093-15-0190	I.S. 143 Manhattan	1154	Air	<7.0	<0.002	0	0	<13.33	<0.0044
04/07/02	7094-09-0178	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	7096-12-0186	P.S. 199 (Queens)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/07/02	7095-98-0186	P.S. 274 (Brooklyn)	1070	Air	<7.0	<0.003	0	0	<13.33	<0.0048
04/07/02	7097-18-0183	P.S. 44 (S.I)	1178	Air	<7.0	<0.002	0	0	<13.33	<0.0044

Key:
*Structure (S) roughly equivalent to fiber (f)
** Sample volume is based on pump reading
*** Some Sample volume is below recommended limit for TEM analysis
**** Chrysotile
NR - analysis not requested
NS - Sample not submitted for analysis
n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network **Data Validation Date: 4/16/02**
Sampling Date and Time: 4/10/02 1200 to 2400

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5μ - 5μ	5μ	S/mm^2	S~f/cc**
04/10/02	7093-18-0195	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	7093-19-0195	Chambers Street	1310	Air	<7.0	<0.002	0	0	<16.00	<0.0047
04/10/02	7093-15-0193	I.S. 143 Manhattan	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	7094-09-0181	P.S. 154 (Bronx)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	7096-12-0189	P.S. 199 (Queens)	1302	Air	<7.0	<0.002	0	0	<16.00	<0.0047
04/10/02	7095-98-0189	P.S. 274 (Brooklyn)	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/10/02	7097-18-0186	P.S. 44 (S I)	1146	Air	<7.0	<0.002	0	0	<13.33	<0.0045

Key:
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**** Chrysotile
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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 4/11/02 1200 to 2400

Data Validation Date: 4/17/02

					PCM by NIOSH 7400		TEM (AHERA)			
							Structures (#)			
Sampling Date	Sample No.	Sampling Location	Sample Volume	Matrix	f/mm^2	f/cc	0.5µ - 5µ	5µ	S/mm^2	S~f/cc**
04/11/02	7093-18-0196	Park Row	1218	Air	<7.0	<0.002	0	0	<13.33	<0.0042
04/11/02	7093-19-0196	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
04/11/02	7093-15-0194	I.S. 143 Manhattan	1178	Air	<7.0	<0.002	0	0	<13.33	<0.0044
04/11/02	7094-09-0182	P.S. 154 (Bronx)	1090	Air	<7.0	<0.002	0	0	<13.33	<0.0047
04/11/02	7096-12-0190	P.S. 199 (Queens)	1400	Air	<7.0	<0.002	0	0	<16.00	<0.0044
04/11/02	7095-98-0190	P.S. 274 (Brooklyn)	1140	Air	<7.0	<0.002	0	0	<13.33	<0.0045
04/11/02	7097-18-0187	P.S. 44 (S I)	740	Air	<7.0	<0.004	0	0	<8.00	<0.0042

Key:

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**** Chrysotile
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n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm^2, volume 1200 L, for 25 mm filter (TEM)

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/21/02

Sample No.	WG-7170-1P		06811		06812		06813		06814		06815		06816	
Sampling Location	Method Blank		R		E		P		S		S		D	
Sample Volume (L)	0		7245		6810		7650		7215		7320		6690	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of MoCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of DiCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of TrCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of TeCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of PeCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of HxCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of HpCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of OcCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Sum of NoCBs	U	10.0	U	1.38	U	1.47	U	1.31	U	1.39	U	1.37	U	1.49
Total	0		0		0		0		0		0		0	

COC# 03/21/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 4/17/02

3-21-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/21/02

Sample No.	06817		06818		06819		06820		06821		06822	
Sampling Location	C		B		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	7530		6180		7845		5295		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DcCB	U	1.33	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of MoCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of DiCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of TrCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of TeCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of PeCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of HxCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of HpCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of OcCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Sum of NoCBs	U	1.31	U	1.62	U	1.27	U	1.89	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 03/21/02-Dioxin

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/27/02

Sample No.	WG-7185-1P		06823		06824		06825		06826		06827		06828	
Sampling Location	Method Blank		R		R		E		P		S		D	
Sample Volume (L)	0		5085		5775		5880		7485		6390		5190	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng	ng	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3
209-DeCB	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of MoCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of DiCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of TrCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of TeCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of PeCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of HxCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of HpCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of OcCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Sum of NoCBs	U	10.0	U	1.97	U	1.73	U	1.70	U	1.34	U	1.56	U	1.93
Total	0		0		0		0		0		0		0	

COC# 03/27/02-Dioxin

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Stuyvesant High), access to TAGA bus area
M: Western end of Harrison St. at West St. (on tree next to bulkhead)
N: South side of Pier 25 (next to volleyball court)
P: NE corner of South End Ave. & Albany
Q: Barclay & West St. (center island) in proximity to USCG command post
R: TAGA Bus Location
S: Rector & South End

Loc 3: SW side of WTC5
Loc 3A: Between WTC4 and WTC5
Loc 3B: Church & Vesey

U: denotes not detected
MDL: denotes method detection limit

ERT: 4/17/02

3-27-02PCBair.xls

WTC Emergency Response
Air Samples - Modified Method 680 PCB results
Sampling Date 03/27/02

Sample No.	06829		06830		06831		06832		06833		06834	
Sampling Location	C		B		3A		A		Field Blank		Lot Blank	
Sample Volume (L)	7605		7260		5535		6600		0		0	
Analyte	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL
	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng/m^3	ng	ng	ng	ng
209-DcCB	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of MoCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of DiCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of TrCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of TeCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of PeCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of HxCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of HpCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of OcCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Sum of NoCBs	U	1.31	U	1.38	U	1.81	U	1.52	U	10.0	U	10.0
Total	0		0		0		0		0		0	

COC# 03/27/02-Dioxin

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 18, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D089	1	900	07:30	10	00:00:30	1	0.0	0.1	40.8	2012.1
3	74.198685	40.570054	D075	1	900	07:30	10	00:00:30	1	0.0	0.1	33.0	857.7
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D074	1	900	07:30	10	00:00:30	1	0.0	0.1	32.4	2146.7
6	74.207406	40.563818	D065	1	900	07:30	10	00:00:30	1	0.0	0.1	30.9	670.6
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D088	1	900	07:30	10	00:00:30	1	0.0	0.1	34.2	937.9

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 18, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0624	0627	0622
Stop Time	1430	1434	1429
Run Time (minutes)	486	487	487
Maximum Concentration (ug/m^3)	58.06	73.84	58.03
Average Concentration (ug/m^3)	28.18	26.85	29.70

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/18/02

File Name	NYC1576	NYC1577	NYC1578	NYC1579	NYC1581	NYC1580
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07735	A07736	A07737	A07738
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	**690**	RL
Acetone	RL	RL	RL	RL	**43**	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

U.S. Environmental Protection Agency (EPA)
Daily Summary
Saturday-Monday, April 20-22, 2002

The U.S. Environmental Protection Agency (EPA) and other federal, state and local agencies have collected extensive environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Since September 11, EPA has taken samples of the air, dust, water, river sediments and drinking water and analyzed them for the presence of pollutants that might pose a health risk to response workers at the World Trade Center site and the public. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. EPA is collecting data from more than 20 fixed monitors in and around ground zero and additional monitors in the Bronx, Brooklyn, Queens and Staten Island. The Agency is also using portable sampling equipment to collect data from a range of locations.

Most Recent Results as of 4:15 p.m. on April 22

Lower Manhattan:

Air Sampling for Particulates - EPA collected samples from April 19 through April 21 at Location "L" (northeast side of Stuyvesant High School) and Location "N" (south side of Pier 25). EPA also collected samples on April 19 and April 20 at Location "R" (northwest side of Stuyvesant High School). All readings were below the OSHA time-weighted permissible exposure limit for particulates.

Air Sampling for VOC's - Sampling for volatile organic compounds (VOC's) was conducted from April 19 through April 21 in the direct area of the excavation at ground zero. To protect workers at the work site, EPA takes grab samples of VOC's where smoke plumes have been sighted. The results are snapshots of the levels at a moment in time. OSHA's protective standards set a permissible exposure limit (PEL) averaged over an 8-hour day.

All samples taken from April 19 through April 21 at EPA's Wash Tent (West & Murray Streets), Austin Tobin Plaza, and the North Tower and South Tower excavation areas either showed no detectable levels of VOCs, or the levels of VOCs did not exceed OSHA standards.

Staten Island Landfill:

Air Sampling for Particulates - There were no significant readings from samples collected on April 20 and April 21.

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Monday, April 22, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

NYC / ER (Apr 3, 0001 - 1200 hrs)

Results pending.

Landfill Ambient Air Sampling Locations

Fresh Kills (Apr 7)

Results pending.

Fresh Kills (Apr 13)

Results pending.

Fresh Kills (Apr 20) - Particulate Monitoring (Dataram)

Nothing of significance reported at four stations (P-2, P-3, P-6, and P-8) based on daily average concentrations.
Particulate measurements were not taken at Location P-5 due to an equipment malfunction.
Shortened monitoring period due to the weather conditions.

Fresh Kills (Apr 21) - Particulate Monitoring (Dataram)

Nothing of significance reported at five stations (P-2, P-3, P-5, P-6, and P-8) based on daily average concentrations.

Fresh Kills (Apr 22) - Particulate Monitoring (Dataram)

Particulate measurements were not taken due to weather conditions.

Ambient Air Sampling Locations

NYC / ER (Mar 10) - Asbestos Monitoring (Particulate Monitoring Stations - 'Extended Network')

Results pending.

NYC / ER (Apr 19) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 8 hours.
Location L had an average of 60.65 ug/m^3 with a maximum reading of 118.95 ug/m^3.
Location N had an average of 53.26 ug/m^3 with a maximum reading of 107.03 ug/m^3.
Location R had a maximum reading of 117.29 ug/m^3 (the average concentration was rejected).

NYC / ER (Apr 20) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L, N, and R were below the OSHA TWA.
Instruments operated approximately 5 hours.
Location L had an average of 21.38 ug/m^3 with a maximum reading of 48.99 ug/m^3.
Location N had an average of 23.00 ug/m^3 with a maximum reading of 53.89 ug/m^3.
Location R had an average of 25.73 ug/m^3 with a maximum reading of 72.40 ug/m^3.

NYC / ER (Apr 21) - Particulate Monitoring (Dataram)

Particulate levels noted at Locations L and N were below the OSHA TWA.
Instruments operated approximately 8 hours.
Location L had an average of 9.27 ug/m^3 with a maximum reading of 26.25 ug/m^3.
Location N had a maximum reading of 11.23 ug/m^3 (the average concentration was rejected).
Particulate measurements were not taken at Station R due to vandalism.

NYC / ER (Apr 19) - Volatile Organics (Mobile Laboratory)

Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 20) - Volatile Organics (Mobile Laboratory)

Aside from one volatile organic compound detected at the North Tower, no other volatiles were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

NYC / ER (Apr 21) - Volatile Organics (Mobile Laboratory)

Aside from one volatile organic compound detected at the South Tower, no other volatiles were detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower).

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 21, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D075	1	929	07:44	10	00:00:30	1	0.0	0.1	5.89	1074.8
3	74.198685	40.570054	D088	1	923	07:41	10	00:00:30	1	0.0	0.1	24.68	3773.3
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D089	1	913	07:36	10	00:00:30	1	0.0	0.1	18.06	2682.3
6	74.207406	40.563818	D074	1	535	04:27	10	00:00:30	1	0.0	0.1	19.11	833.91
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D065	1	871	07:15	10	00:00:30	1	0.0	0.1	13.09	665.35

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
April 20, 2002

Perimeter Location	Longitude	Latitude	DataRam Serial #	Tag #	Logged Points	Elapsed Time (hrs.)	Avg. Time (sec.)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	74.199795	40.565139	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	74.198262	40.566883	D074	1	535	04:27	10	00:00:30	1	0.0	0.1	19.11	833.91
3	74.198685	40.570054	D065	1	520	04:19	10	00:00:30	1	0.0	0.1	17.84	252.75
4	74.201380	40.569790	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5	74.205873	40.568892	D075	1	1	N/a	10	00:00:30	1	0.0	0.1	N/a	N/a
6	74.207406	40.563818	D088	1	472	03:56	10	00:00:30	1	0.0	0.1	16.72	705.45
7	74.205414	40.560434	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
8	74.203019	40.561915	D089	1	430	03:35	10	00:00:30	1	0.0	0.1	24.82	1586.2

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 21, 2002

Location	L	N	R*
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	-
Start Time	0643	0648	-
Stop Time	1433	1437	-
Run Time (minutes)	470	469	-
Maximum Concentration (ug/m^3)	26.25	11.23	-
Average Concentration (ug/m^3)	9.27	-	-

* equipment vandalized

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 20, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0632	0636	0631
Stop Time	1149	1153	1148
Run Time (minutes)	517	517	517
Maximum Concentration (ug/m^3)	48.99	53.89	72.40
Average Concentration (ug/m^3)	21.38	23.00	25.73

United States Environmental Protection Agency
DataRAM Monitoring Work Sheet

Site: World Trade Center
Date: April 19, 2002

Location	L	N	R
DataRAM I.D. No.	D080	D081	D076
Flow Rate (liters/minute)	2.0	2.0	2.0
Start Time	0641	0645	0639
Stop Time	1432	1436	1431
Run Time (minutes)	471	471	472
Maximum Concentration (ug/m^3)	118.95	107.03	117.29
Average Concentration (ug/m^3)	60.65	53.26	-

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/21/02

File Name	NYC1604	NYC1605	NYC1606	NYC1607	NYC1609	NYC1608
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07747	A07748	A07749	A07750
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	23
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/20/02

File Name	NYC1596	NYC1597	NYC1598	NYC1599	NYC1601	NYC1600
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07743	A07744	A07745	A07746
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb,	ppb,	ppb,	ppb,	ppb,	ppb,
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	320	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
0-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 04/19/02

File Name	NYC1588	NYC1589	NYC1590	NYC1591	NYC1593	NYC1592
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
			Ambient Air			
Sample Number			A07739	A07740	A07741	A07742
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	250 mL	250 mL
Reporting Limit (RL)	20	20	20	20	20	20
Sample Conc. Units	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v	ppb_v
Propylene	RL	RL	RL	RL	RL	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	RL	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	RL	RL	RL	RL
Acetone	RL	RL	RL	RL	RL	RL
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	RL	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	RL	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	RL	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

ATTACHMENT 4

ENVIRONMENTAL PROTECTION AGENCY

EPA PERSONAL SAFETY & HEALTH PROTECTION RECOMMENDATIONS FOR SEARCH AND RESCUE PERSONNEL

PERSONAL PROTECTION EQUIPMENT (PPE)

All personnel in the work area should wear the following:
- Hard hats.
- Steel-toed/heavy duty work shoes.
- Long pants and long sleeve work shirts.
- Safety glasses/eye protection.
- Respiratory protection.

  Ground zero: Approved respirator (P–100 or equivalent).
  Other areas: Dust mask (N–100/R–100 or equivalent).

WORK AREA SAFETY CONCERNS

- Watch surroundings at all times.
- Be alert for materials and debris that may fall from damaged buildings.
- Cap and secure unused pressurized cylinders.
- As far as practical, try to keep the generation of dusts to a minimum.
- Use the buddy system.

WORK AREA HEALTH CONCERNS

- Clean respirators and eye wear as frequently as possible.
- No consumption of foods that have not been covered or properly sealed.
- When leaving work area:

  Dust off clothing.
  Clean or scrape off shoes.
  Wash hands and face.

HEAVY EQUIPMENT OPERATIONS

- Stand clear of operating equipment and vehicles.
- Avoid entering crane swing radius.
- Use tag lines when lifting loads.
- Use spotter during lifting operations and for personnel safety in area (no lifting over personnel/equipment).
- All equipment operators wear proper PPE when leaving equipment (see above).
- Be cautious of operating speeds in work areas and especially when leaving the area.

  Recommend speeds no faster than 10 mph until outside hazard areas.

EMERGENCY SIGNALS

- *Immediately Stop Work/Evaluate Area:* Three (3) repeated short blasts of siren/air horn.
- *Stop Work/Remain Silent:* One (1) long blast of siren/air horn.
- *Restart Work:* One (1) long and two (2) short blasts of siren/air horns.

ATTACHMENT 5

ASBESTOS HAZARDS AND PRECAUTIONS

In response to the World Trade Center devastation, concerns have been raised with breathing asbestos-contaminated material and irritation from skin and eye contact. Asbestos was likely used in various construction materials used to build the World Trade Center. Short-term exposure to asbestos can cause respiratory, skin, or eye irritation. These symptoms can also be experienced from contact with non-asbestos dust, such as a concrete particulate debris.

For the public the best response is to remain indoors with windows shut if possible. For emergency workers air purifying respirators should be used when available but paper filament masks will provide sufficient protection under minimal exposure conditions.

Cleanup workers should be protected with appropriate eye protection, air purifying respirators and personal protective clothing, such as TYVEKs, to prevent skin irritation. Workers should practice basic decontamination procedures, such as washing hands and faces. To minimize air-borne contamination, debris should be misted or sprayed with water during cleanup operations.

ATTACHMENT 6

EPA PRESS RELEASE: EPA RESPONSE TO SEPTEMBER 11

SEPTEMBER 13, 2001

EPA INITIATES EMERGENCY RESPONSE ACTIVITIES, REASSURES PUBLIC ABOUT ENVIRONMENTAL HAZARDS

U.S. Environmental Protection Agency Administrator Christie Whitman today announced that EPA is taking steps to ensure the safety of rescue workers and the public at the World Trade Center and the Pentagon disaster sites, and to protect the environment. EPA is working with State, Federal, and local agencies to monitor and respond to potential environmental hazards and minimize any environmental effects of the disasters and their aftermath.

At the request of the New York City Department of Health, EPA and the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) have been on the scene at the World Trade Center monitoring exposure to potentially contaminated dust and debris. Monitoring and sampling conducted on Tuesday and Wednesday have been very reassuring about potential exposure of rescue crews and the public to environmental contaminants.

EPA's primary concern is to ensure that rescue workers and the public are not exposed to elevated levels of asbestos, acidic gases or other contaminants from the debris. Sampling of ambient air quality found either no asbestos or very low levels of asbestos. Sampling of bulk materials and dust found generally low levels of asbestos.

The levels of lead, asbestos and volatile organic compounds in air samples taken on Tuesday in Brooklyn, downwind from the World Trade Center site, were not detectable or not of concern.

Additional sampling of both ambient air quality and dust particles was conducted Wednesday night in Lower Manhattan and Brooklyn, and results were uniformly acceptable.

"EPA is greatly relieved to have learned that there appears to be no significant levels of asbestos dust in the air in New York City," said Administrator Whitman. "We are working closely with rescue crews to ensure that all appropriate precautions are taken. We will continue to monitor closely."

Public health concerns about asbestos contamination are primarily related to long-term exposure. Short-term, low-level exposure of the type that might have been produced by the collapse of the World Trade Center buildings is unlikely to cause significant health effects. EPA and OSHA will work closely with rescue and cleanup crews to minimize their potential exposure, but the general public should be very reassured by initial sampling.

EPA and OSHA will continue to monitor and sample for asbestos, and will work with the appropriate officials to ensure that rescue workers, cleanup crews and the general public are properly informed about appropriate steps that should be taken to ensure proper handling, transportation and disposal of potentially contaminated debris or materials.

EPA is taking steps to ensure that response units implement appropriate engineering controls to minimize environmental hazards, such as water sprays and rinsing to prevent or minimize potential exposure and limit releases of potential contaminants beyond the debris site.

EPA is also conducting downwind sampling for potential chemical and asbestos releases from the World Trade Center debris site. In addition, EPA has deployed Federal On-Scene Coordinators to the Washington, DC Emergency Operations Center, Fort Meade, and FEMA's alternate Regional Operations Center in Pennsylvania, and has deployed an On-Scene Coordinator to the Virginia Emergency Operations Center.

Under its response authority, EPA will use all available resources and staff experts to facilitate a safe emergency response and cleanup.

EPA will work with other involved agencies as needed to:

• procure and distribute respiratory and eye protection equipment in cooperation with the Department of Health and Human Services;
• provide health and safety training upon request;
• design and implement a site monitoring plan;
• provide technical assistance for site control and decontamination; and
• provide some 3000 asbestos respirators, 60 self-contained breathing apparatuses and 10,000 protective clothing suits to the two disaster sites.

New York Governor George E. Pataki has promised to provide emergency electric generators to New York City in efforts to restore lost power caused by Tuesday's tragedy, and EPA will work with State authorities to expedite any necessary permits for those generators.

OSHA is also working with Consolidated Edison regarding safety standards for employees who are digging trenches because of leaking gas lines underground. OSHA has advised Con Edison to provide its employees with appropriate respirators so they can proceed with emergency work, shutting off gas leaks in the city.

ATTACHMENT 7

EPA PRESS RELEASE: EPA RESPONSE TO SEPTEMBER 11

SEPTEMBER 14, 2001

EPA EMERGENCY RESPONSES AT WORLD TRADE CENTER AND PENTAGON

After terrorists struck the World Trade Center and the Pentagon on September 11, 2001, 26 EPA specialists were on the scene within hours. Currently, more than 225 EPA experts are responding to the WTC and Pentagon disasters. EPA criminal investigators, forensic and technical specialists and emergency response experts are providing support to FEMA, the FBI and local emergency officials. EPA is one of many Federal agencies responsible for responding to this national crisis.

The primary mission of EPA's Emergency Response Program is to protect the public and the environment from immediate threats posed by the release or discharge of hazardous substances and oil. Emergency response personnel are monitoring potential air quality issues; analyzing samples for asbestos and other hazardous materials and oil sampling; and disposing of biomedical waste. EPA has worked with the State of New York and Virginia to waive landfill amount requirements to expedite the removal of debris from the scenes.

EPA has initially budgeted $600,000 to provide technical assistance and response support. More than 3,000 respirators, 60 self-contained breathing apparatus machines, and 10,000 specially-equipped protective suits are on the way to these disaster sites. EPA is working closely with Federal, State, and local partners to ensure that all workers and volunteers involved in the rescue and cleanup efforts are properly protected.

EPA Region 2 emergency response staff are also stationed at the FBI Joint Operations Center in New York City, Trenton, New Jersey Emergency Operations Center, and FEMA's office in Albany, NY. Region 2's Edison, NJ office is also providing work space for 100 FEMA employees. EPA HQ Emergency Operations Center is operating on a 24-hour basis, while R3 has emergency responders deployed to Washington, DC., Ft. Meade and at the Willow Grove Naval Air Station in Pennsylvania.

EPA will continue to coordinate with our Federal partners to ensure the health and safety of the public and the environment during this national crisis.

More information is available at: *EPA's Environmental Response Team Center, EPA's Oil Spill Program, and EPA's Superfund Program.*

ATTACHMENT 8

EPA PRESS RELEASE: EPA RESPONSE TO SEPTEMBER 11

SEPTEMBER 18, 2001

WHITMAN DETAILS ONGOING AGENCY EFFORTS TO MONITOR DISASTER SITES, CONTRIBUTE TO CLEANUP EFFORTS

EPA Administrator Christie Whitman announced today that results from the Agency's air and drinking water monitoring near the World Trade Center and Pentagon disaster sites indicate that these vital resources are safe. Whitman also announced that EPA has been given up to $83 million from the Federal Emergency

Management Agency (FEMA) to support EPA's involvement in cleanup activities and ongoing monitoring of environmental conditions in both the New York City and Washington metropolitan areas following last week's terrorist attacks on the World Trade Center and the Pentagon.

"We are very encouraged that the results from our monitoring of air quality and drinking water conditions in both New York and near the Pentagon show that the public in these areas is not being exposed to excessive levels of asbestos or other harmful substances," Whitman said. "Given the scope of the tragedy from last week, I am glad to reassure the people of New York and Washington, DC that their air is safe to breath and their water is safe to drink," she added.

In the aftermath of last Tuesday's attacks, EPA has worked closely with State, Federal and local authorities to provide expertise on cleanup methods for hazardous materials, as well as to detect whether any contaminants are found in ambient air quality monitoring, sampling of drinking water sources and sampling of runoff near the disaster sites.

At the request of FEMA, EPA has been involved in the cleanup and site monitoring efforts, working closely with the U.S. Coast Guard, the Centers for Disease Control (CDC), the Occupational Safety and Health Administration (OSHA) and State and local organizations.

EPA has conducted repeated monitoring of ambient air at the site of the World Trade Center and in the general Wall Street district of Manhattan, as well as in Brooklyn. The Agency is planning to perform air monitoring in the surrounding New York metropolitan area. EPA has established 10 continuous (stationary) air monitoring stations near the WTC site. Thus far, from 50 air samples taken, the vast majority of results are either non-detectable or below established levels of concern for asbestos, lead and volatile organic compounds. The highest levels of asbestos have been detected within one-half block of Ground Zero, where rescuers have been provided with appropriate protective equipment.

In Lower Manhattan, the City of New York has also been involved in efforts to clean anything coated with debris dust resulting from Tuesday's destruction. This involves spraying water over buildings, streets and sidewalks to wash the accumulated dust off the building and eliminate the possibility that materials would become airborne. To complement this clean-up effort, EPA has performed 62 dust sample analyses for the presence of asbestos and other substances. Most dust samples fall below EPA's definition of "asbestos containing material" (one percent asbestos). Where samples have shown greater than 1 percent asbestos, EPA has operated its 10 High Efficiency Particulate Arresting, HEPA, vacuum trucks to clean the area and then resample. EPA also used the 10 HEPA vac trucks to clean streets and sidewalks in the Financial District in preparation for Monday's return to business. The Agency plans to use HEPA vac trucks to clean the lobbies of the five Federal buildings near the World Trade Center site, and to clean the streets outside of New York's City Hall.

Drinking water in Manhattan was tested at 13 sampling points, in addition to one test at the Newtown Sewage Treatment plant and pump station. Initial results of this drinking water sampling show that levels of asbestos are well below EPA's levels of concern.

While FEMA has provided EPA with a Total Project Ceiling cost of slightly more than $83 million for the Agency's cleanup efforts in New York City and in at the Pentagon site, EPA currently is working with emergency funding of $23.7 million. If costs exceed this level, FEMA will authorize EPA to tap additional funding in increments of $15 million. As part of the additional funding to be provided by FEMA, EPA will be responsible for any hazardous waste disposal, general site safety and providing sanitation facilities for many of the search and rescue workers to wash the dust off following their shifts. EPA is coordinating with both the U.S. Air Force Center for Environmental Excellence and the U.S. Coast Guard to quickly implement these additional responsibilities to ensure that search and rescue personnel are provided with the maximum support and protection from hazardous materials that may be found during their mission.

At the Pentagon explosion site in Arlington, VA, EPA has also been involved in a variety of monitoring of air and water quality. All ambient air monitoring results, both close to the crash site and in the general vicinity, have shown either no detection of asbestos or levels that fall well below the Agency's level of concern. Testing of runoff water from the disaster site does not show elevated levels of contaminants. Given the large numbers of Department of Defense (DOD) employees returning to work this week, EPA has worked closely with officials from DOD and from the Occupational Safety and Health Administration (OSHA) to evaluate air and drinking water quality and to be certain that the workplace environment will be safe.

While careful not to impede the search, rescue and cleanup efforts at either the World Trade Center or the Pentagon disaster sites, EPA's primary concern has been to ensure that rescue workers and the public are not being exposed to elevated levels of potentially hazardous contaminants in the dust and debris, especially where practical solutions are available to reduce exposure. EPA has assisted efforts to provide dust masks to rescue workers to minimize inhalation of dust. EPA also recommends that the blast site debris continue to be kept wet, which helps to significantly reduce the amount of airborne dust which can aggravate respiratory ailments such as asthma. On-site facilities are being made available for rescue workers to clean themselves, change their clothing and to have dust-laden clothes cleaned separately from normal household wash.

ATTACHMENT 9

EPA PRESS RELEASE: EPA RESPONSE TO SEPTEMBER 11

SEPTEMBER 21, 2001

NYC MONITORING EFFORTS CONTINUE TO SHOW SAFE DRINKING WATER & AIR

EPA Administrator Christie Whitman announced today that the most detailed results to date of ongoing monitoring of drinking water in New York City provide additional reassurance that city residents are not being exposed to dangerous contaminants including asbestos, radiation, mercury and other metals, pesticides, PCBs and bacteria.

"As we continue to monitor drinking water in and around New York City, and as EPA gets more comprehensive analysis of this monitoring data, I am relieved to be able to reassure New York and New Jersey residents that a host of potential contaminants are either not detectable or are below the Agency's concern levels," Whitman said. "Results we have just received on drinking water quality show that not only is asbestos not detectable, but also we can not detect any bacterial contamination, PCBs or pesticides," she continued.

Whitman confirmed that EPA personnel, working in coordination with the New York City Department of Environmental Protection at and around the World Trade Center disaster site, have thus far taken a total of 13 drinking water samples from water mains in Lower Manhattan. In addition to analyzing the samples for asbestos, pesticides and PCBs (polychlorinated biphenyls, which are mixtures of synthetic organic chemicals), EPA has also tested drinking water for metals (including mercury), and radioactivity (both alpha and beta). None of these contaminants exceeded EPA drinking water standards.

"In addition to carefully evaluating drinking water in the New York area, EPA has taken samples at the Newtown Creek Wastewater Treatment Plant, where runoff from Lower Manhattan goes for treatment, to identify what sort of materials are leaving the disaster site," Whitman continued. "While we haven't yet gotten results for all possible contaminants, we do know that levels of metals and mercury are below permit discharge limits," she noted. However, Whitman did state that "following one rainstorm with particularly high runoff, we did have one isolated detection of slightly elevated levels of PCBs. This is something that we are continuing to monitor very closely." Other analysis of monitoring data taken at Newtown Creek treatment plant shows that total suspended solids and biochemical oxygen demand, common indicators of how well a wastewater treatment plant is operating, indicate that the plant is working within permit limits. The Agency will continue to collect water samples at storm water discharge points when it rains and to fully analyze the samples for asbestos, PCBs, metals and total suspended solids.

Whitman elaborated on the repeated monitoring of ambient air both at the World Trade Center disaster site and the surrounding area. To date the Agency has taken 97 air samples from 11 separate fixed monitoring sites in and around the "hot zone" and elsewhere in Lower Manhattan, and four fixed monitoring sites located in New Jersey downwind from the blast. Only seven samples taken at or near Ground Zero have had marginally higher levels of asbestos that exceed EPA's level of concern. All rescue workers in this restricted-access area are being provided with appropriate safety equipment. Ambient air monitoring in the Financial District, where this week people have returned to work, show levels of asbestos that are below Agency levels of concern. Four samples taken specifically to identify if mercury is present resulted in non-detectable readings. On September 19, EPA also took readings of outdoor air at numerous locations around Ground Zero for chemicals including hydrogen sulfide, volatile organic compounds (VOCs), carbon monoxide and sulfur dioxide. All read-

ings indicated that levels were normal and posed no public health concern. All air samples taken in New Jersey have shown no detectable levels of asbestos whatsoever.

EPA has set up eight air monitors at the Fresh Kills Landfill on Staten Island, where debris from the collapsed World Trade Center towers is being sent for criminal and forensic analysis, and eventual disposal. Initial results show no detectable levels of asbestos. The Agency will continue to operate these air monitors at the landfill and will test for asbestos and for particulate matter.

Whitman detailed dust sampling undertaken thus far at the World Trade Center site, and confirmed that EPA has done a total of 101 dust samples, of which 37 were slightly over the 1 percent asbestos (the amount above which material is considered asbestos-containing). EPA has continued to use its 10 High Efficiency Particulate Arresting (HEPA) filter vacuum trucks, especially in areas where dust samples show any elevated levels of asbestos. Of the 16 samples taken in the Battery Park City area, a residential community within two blocks of the disaster site, 12 showed slightly elevated levels of asbestos. After using the HEPA Vac trucks to clean streets and surfaces in Battery Park City, repeat sampling in the area showed asbestos levels that fall below concern amounts. EPA will continue to monitor this area. The HEPA Vac trucks were also used to vacuum lobbies of Federal buildings near the disaster site prior to having workers return.

Monitoring and cleanup efforts also continue at the Pentagon crash site. To date, EPA has taken 140 total samples, including ambient air samples, bulk debris analysis, silica and water discharge samples. Monitoring samples have been analyzed for asbestos and other hazardous materials.

ATTACHMENT 10

EPA Response to September 11

EPA and OSHA Web Sites Provide Environmental Monitoring Data From World Trade Center and Surrounding Areas

DATA CONFIRMS NO SIGNIFICANT PUBLIC HEALTH RISKS; RESCUE CREWS AND NEARBY RESIDENTS SHOULD TAKE APPROPRIATE PRECAUTIONS DATA THROUGH SEPTEMBER 30, 2001

U.S. Environmental Protection Agency (EPA) Administrator Christie Whitman and U.S. Department of Labor Assistant Secretary for Occupational Safety and Health (OSHA) John Henshaw announced today that both Federal agencies are providing the public with extensive additional environmental monitoring data from the World Trade Center site and nearby areas in Manhattan, Brooklyn and New Jersey. Both agencies have taken hundreds of samples to monitor environmental conditions since September 11th, and have found no evidence of any significant public health hazard to residents, visitors or workers beyond the immediate World Trade Center area.

In response to public requests for more detailed information, EPA and OSHA are making the results of environmental and occupational sampling available on their sites on the World Wide Web (*www.epa.gov* and *www.osha.gov*), and will post additional data as it becomes available.

EPA and OSHA, working closely with other Federal, state, and local agencies, have been sampling the air, dust, water, river sediments and drinking water and analyzing them for the presence of pollutants such as asbestos, radiation, mercury and other metals, pesticides, PCBs, or bacteria that might create health hazards. They have found no evidence of any significant public health hazard to residents or visitors to the New York metropolitan area.

"EPA's website now has more detailed information on environmental monitoring information in New York City that should be very reassuring to residents, tourists and workers, and we will continue to update that site with information as it becomes available" said EPA Administrator Whitman. "Our data show that contaminant levels are low or nonexistent, and are generally confined to the Trade Center site. There is no need for concern among the general public, but residents and business owners should follow recommended procedures for cleaning up homes and businesses if dust has entered."

OSHA Administrator John Henshaw confirmed that workers on the site should take appropriate steps to protect themselves, but there is no threat to public health. "We have more than 200 staffers involved in a round-the-clock effort, continually monitoring conditions to ensure the safety and health of workers," Administrator

Henshaw said. "It is important for workers involved in the recovery and clean up to wear protective equipment as potential hazards and conditions are constantly changing at the site; however, our samples indicate there is no evidence of significant levels of airborne asbestos or other contaminants beyond the disaster site itself."

On the whole, despite questions about potential contaminants from the Trade Center site, EPA and OSHA data indicates there is no cause for general public concern. Residents and workers returning to buildings where dust from the Trade Center has entered the building should follow proper procedures in cleaning buildings, but the general public should feel very reassured about the extensive environmental monitoring data that has been collected and analyzed. Rescue and recovery crews working on the Trade Center site should take steps to protect themselves from potential exposure to contaminants by using respirators and washing stations as recommended by EPA and OSHA.

In total, EPA and OSHA have taken 835 ambient air samples in the New York City metropolitan area. EPA is currently collecting data from 16 fixed air monitors at Ground Zero and in the residential and business districts around the site, and both EPA and OSHA are using portable sampling equipment to collect data from a range of locations throughout the area.

Out of a total of 442 air samples EPA has taken at Ground Zero and in the immediate area, only 27 had levels of asbestos above the standard EPA uses to determine if children can re-enter a school after asbestos has been removed a stringent standard based upon assumptions of long-term exposure. OSHA has analyzed 67 air samples from the same area, and all were below the OSHA workplace standard for asbestos.

All 54 air samples from EPA's four monitors in New Jersey found no levels above EPA's standard. Another 162 samples were taken from EPA's monitors at the Fresh Kills landfill in Staten Island, where debris from the World Trade Center is being taken; only two exceeded EPA's standard.

Of 177 bulk dust and debris samples collected by EPA and OSHA and analyzed for asbestos, 48 had levels over 1 percent, the level EPA and OSHA use to define asbestos-containing material. Although early samples from water runoff into the Hudson and East Rivers showed some elevated levels of polychlorinated biphenyls (PCBs), dioxin, asbestos and metals, recent results find non-detectable levels of asbestos, and PCBs and polycyclic aromatic hydrocarbons (PAHs) and metals below the level of concern.

EPA and OSHA have also conducted sampling for the presence of metals (lead, iron oxide, zinc oxide, copper and beryllium) at Ground Zero and in surrounding areas. None of the levels of these metals have exceeded OSHA limits.

Although EPA has measured dioxin levels in and around the World Trade Center site that were at or above EPA's level for taking action, the risk from dioxin is based on long-term exposure. EPA and OSHA expect levels to diminish as soon as the remaining fires on the site are extinguished.

Of the 36 samples of volatile organic compounds (VOCs) taken around Ground Zero to assist response workers in determining the appropriate level of respiratory protection, several samples have been above the OSHA standard for workers. None presented an immediate risk to workers, and the levels are expected to decline when the fires are out.

Fact sheets with more specific information for various parts of the New York City metropolitan area are available:

- Environmental Information from Ground Zero at the World Trade Center Site.
- Environmental Information from Lower Manhattan for Residents, Area.
- Employees and Local Business Owners.
- Other Environmental Issues Related to the Attack on the World Trade Center.

LATEST AVAILABLE DAILY ENVIRONMENTAL MONITORING SUMMARY

Resources on the World Wide Web:

- U.S. Department of Labor's Occupational Safety and Health Administration.
- New York City Department of Health.
- U.S. Department of Health and Human Services.

ATTACHMENT 11

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 2,
Edison, NY, October 5, 2001.

Mr. KELLY R. MCKINNEY, *Associate Commissioner,*
Bureau of Regulatory and Environmental Health Services,
New York, NY.

DEAR MR. MCKINNEY: Health and safety concerns for workers as the World Trade Center Disaster Site (WTC) has been a concern from the beginning of the response. In addition to standard construction/demolition site safety concerns, this Site also poses threats to workers related to potential exposure to hazardous substances. Sources of hazardous substances include (1) building materials from the destroyed buildings (primarily asbestos), (2) hazardous materials that were stored in the buildings (refrigerants, hazardous wastes, ethylene glycol, compressed gas cylinders, etc.), and (3) products of combustion being emitted from the fires that continue to burn within the debris piles. EPA, along with a number of other Federal, State and your agency, has been gathering information about these threats to worker health. Air sampling by EPA and others indicates that asbestos and other contaminants are present in the air at the WTC. EPA has recommended, and continues to recommend, that workers at the Site were respiratory protection.

In addition, EPA has recommended, and continues to recommend, that workers utilize personal protective equipment and the personnel wash stations to prevent the spread of asbestos and other hazardous substances from the WTC to their homes, cars, public transportation, food service, locations, etc. We have observed very inconsistent compliance with our recommendations, however, we do not have authority to enforce the worker health and safety policies for non-EPA/USCG employees. Therefore, EPA believes the Incident Commander should adopt and enforce a site-wide Health and Safety Plan. If there is anything I can do to assist you concerning this matter, please feel free to call me at (732) 321–6656.

Sincerely yours,

BRUCE SPRAGUE, *Chief,*
RESPONSE AND PREVENTION BRANCH.

ATTACHMENT 12

U.S. EPA REGION 2

NEWS

EPA ENVIRONMENTAL MONITORING DATA RELATED TO THE WORLD TRADE CENTER DISASTER RESPONSE AVAILABLE TO PUBLIC

EPA INVITES PUBLIC TO NEW INFORMATION REPOSITORY IN LOWER MANHATTAN

FOR IMMEDIATE RELEASE: Tuesday, October 30, 2001

(#01132) NEW YORK, NY—The U.S. Environmental Protection Agency has established an information repository containing environmental monitoring data gathered in response to the World Trade Center disaster. The information is available at the EPA library located at 290 Broadway in Lower Manhattan, which is the location of the agency's regional offices.

EPA began its environmental monitoring work on September 11th, shortly after the terrorist attacks occurred. Since then, the Agency has done extensive sampling and analysis of air quality and dust throughout Lower Manhattan and other potentially impacted areas, including Brooklyn, Staten Island and northern New Jersey. EPA also gathered data on drinking water and river water and sediments. All of this data is updated Monday through Friday and is available at EPA's regional library located on the 16th Floor at 290 Broadway in Lower Manhattan. The library is open to the public Monday through Thursday from 9 a.m. to 4:30 p.m. and on Friday from 9 a.m. to 1 p.m.

"We continue to closely monitor air quality and other environmental conditions in and around Ground Zero," said William J. Muszynski, EPA Acting Regional Administrator. "While we have fortunately not found levels of contaminants that pose a significant health risk to the general public, our efforts to monitor the area and keep the public informed of our findings have not waned. We welcome all concerned members of the public to our Lower Manhattan offices to review the information we've gathered and to visit our Web site."

Much of EPA's monitoring data, including data maps and general environmental summaries, is available at EPA's Web site at *www.epa.gov*.

Attachment 13

mg_asbesto_air_s_mm2_Spreadshee

SampleID	Address	SampleVolume	VolumeUnits	EndDate	BeginTime	EndTime	MethodS	Detected	Sign	Result	Units	Comment	Comments
11931	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		8.55	f/mm2	Front of 1927/1928	
11931	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		0.002	f/cc	Front of 1927/1928	
11931	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	Front of 1927/1928	
11931	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	Front of 1927/1928	
11931	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	Front of 1927/1928	
11931	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	Front of 1927/1928	
11932	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		11.46	f/mm2	Lobby	
11932	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		0.002	f/cc	Lobby	
11932	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	Lobby	
11932	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	Lobby	
11932	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	Lobby	
11932	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	Lobby	
11933	100 Church St	2160	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		15.92	f/mm2	1909/1910	
11933	100 Church St	2160	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		0.003	f/cc	1909/1910	
11933	100 Church St	2160	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	1909/1910	
11933	100 Church St	2160	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	1909/1910	
11933	100 Church St	2160	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	1909/1910	
11933	100 Church St	2160	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	1909/1910	
11934	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		7.64	f/mm2	1902/1910	
11934	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		0.001	f/cc	1902/1910	
11934	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	1902/1910	
11934	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	1902/1910	
11934	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	1902/1910	
11934	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	1902/1910	
11935	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Not Detected	<	7	f/mm2	Alley 1960	
11935	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Not Detected	<	0.001	f/cc	Alley 1960	
11935	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	Alley 1960	
11935	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	Alley 1960	
11935	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	Alley 1960	
11935	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	Alley 1960	
11936	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Not Detected	<	7	f/mm2	Alley 1941	
11936	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Not Detected	<	0.001	f/cc	Alley 1941	
11936	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	Alley 1941	
11936	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	Alley 1941	
11936	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	Alley 1941	
11936	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	Alley 1941	
11937	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		21.98	f/mm2	1935/1937	
11937	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		0.004	f/cc	1935/1937	
11937	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	1935/1937	
11937	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	1935/1937	
11937	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	1935/1937	
11937	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	1935/1937	
11938	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Not Detected	<	7	f/mm2	1835/1837	
11938	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Not Detected	<	0.001	f/cc	1835/1837	
11938	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	1835/1837	
11938	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	1835/1837	
11938	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	1835/1837	
11938	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	1835/1837	
11939	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Not Detected	<	7	f/mm2	18th Floor SW Corner	
11939	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Not Detected	<	0.001	f/cc	18th Floor SW Corner	
11939	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	18th Floor SW Corner	
11939	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	18th Floor SW Corner	
11939	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	18th Floor SW Corner	
11939	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	18th Floor SW Corner	
11940	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		30.57	f/mm2	Front of 1927/1928	
11940	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	PCM NIOSH 7400	Detected		0.005	f/cc	Front of 1927/1928	
11940	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S<5u	Front of 1927/1928	
11940	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected		0	S>5u	Front of 1927/1928	
11940	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	20	S/mm2	Front of 1927/1928	
11940	100 Church St	2400	L	10/23/2001	12:00:00 PM	04:00:00 PM	TEM (AHERA)	Not Detected	<	0.0032	S~f/cc	Front of 1927/1928	
16370	28 Federal Plaza (13th Floor)			9/13/2001			TEM (AHERA)	Detected		0.0084	f/cc		Chrysotile
16371	28 Federal Plaza (13th Floor)			9/13/2001			TEM (AHERA)	Not Detected	<	0.0033	f/cc		
16376	28 Federal Plaza (28th Floor)			9/13/2001			TEM (AHERA)	Not Detected	<	0.0038	f/cc		
16375	28 Federal Plaza (38th Floor)			9/13/2001			TEM (AHERA)	Not Detected	<	0.0039	f/cc		
16374	28 Federal Plaza (39th Floor)			9/13/2001			TEM (AHERA)	Not Detected	<	0.0038	f/cc		
16372	28 Federal Plaza (Lobby South)			9/13/2001			TEM (AHERA)	Detected		0.0072	f/cc		Chrysotile
16373	28 Federal Plaza (Lobby West)			9/13/2001			TEM (AHERA)	Detected		0.0037	f/cc		
27492	290 Broadway (22nd Floor North)			9/13/2001			TEM (AHERA)	Not Detected	<	0.0041	f/cc		
27493	290 Broadway (22nd Floor South)			9/13/2001			TEM (AHERA)	Detected		0.004	f/cc		Chrysotile
27490	290 Broadway (8th Floor)			9/13/2001			TEM (AHERA)	Detected		0.0042	f/cc		
27494	290 Broadway (LL-1)			9/13/2001			TEM (AHERA)	Detected		0.0133	f/cc		Chrysotile
27495	290 Broadway (LL-2)			9/13/2001			TEM (AHERA)	Detected		0.0044	f/cc		Chrysotile

27491	290 Broadway (Lobby)	9/13/2001	TEM (AHERA)	Not Detected	<	0.0043	f/cc

ATTACHMENT 14

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 2

NEWS

FOR RELEASE: Monday, March 25, 2002

FEDERAL, STATE AND CITY AGENCIES ANNOUNCE ACTIONS FOR LOWER MANHATTAN AIR QUALITY

(#02114) New York, NY.—Today the Environmental Protection Agency (EPA), along with New York City and other Federal and State agencies, announced additional actions to address outdoor and indoor air quality. As part of the overall effort to continue to protect air quality, DEP will remove residual debris from rooftops and facades with EPA's guidance. OSHA will work in a coordinated effort with the City and EPA to ensure the safety and health of the workers performing this cleaning.

EPA and New York City will expand the program to remove residual debris from rooftops and facades around the World Trade Center site. In addition, agencies will work to build on an indoor air study conducted in November and December. These actions are a result of the collaborative efforts of the EPA Administrator Christie Whitman's Task Force on Indoor Air and New York City Mayor Michael Bloomberg's Lower Manhattan Air Quality Task Force.

"Actions speak louder than words, and these actions will help increase confidence about outdoor and indoor air quality," said Jane Kenny, EPA Regional Administrator. "We have been working hand-in-hand with the city to resolve the public's health concerns."

"I am extremely pleased that EPA continues to work with the City to address concerns regarding air quality in Lower Manhattan," said incoming DEP Commissioner Christopher Ward.

Tests conducted since September 11th have indicated that there is no evidence of significant long-term health risks to residents and office workers from the air quality in Lower Manhattan. Inspectors from the City and EPA have surveyed area rooftops and facades identifying buildings where residual debris remains. As removal of debris from the World Trade Center site nears completion, city, State and Federal agencies are committed to continuing to protect and improve the downtown environment.

City, State and Federal health and environmental agencies are working collaboratively to continue to assess the cleaning that was conducted and determine testing criteria. Building on earlier tests, EPA will conduct field work to assess cleanup techniques and provide information for ongoing cleaning. The Agency for Toxic Substances and Disease Registry, with support from the New York City Department of Health and EPA, is planning to expand the indoor air study conducted in December 2001.

As these projects are developed, the Federal Emergency Management Agency (FEMA) will fund components that are eligible under its programs. As the agency responsible for coordinating Federal assistance in support of the city's long-term recovery efforts, FEMA is working closely with all concerned agencies.

Both the EPA and New York City Task Forces will work cooperatively to continue to protect air quality. The Lower Manhattan Air Quality Hotline (212–221–8635) will continue to be the principal point of information dissemination to businesses, residents and visitors regarding air quality and environmental issues in and around the World Trade Center site. The City's Task Force will also coordinate additional community outreach and local initiatives as part of the broader effort to build public confidence in the downtown environment.

For more information, call the City's Lower Manhattan Air Quality Hotline at 212–221–8635 between 11 a.m. and 7 p.m. Monday through Friday. In addition, information can be found on: EPA's Web site at: *www.epa.gov;* OSHA's Web site at: *www.osha.gov;* NYC DOH's Web site at: *www.ci.nyc.ny.us/html/doh/home.htm*; and NYCDEDP's Web site at: *www.nyc.gov/html/dep/html/airmonit.html*.

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