S. HRG. 108–362

IMPLEMENTATION OF THE CLEAN WATER ACT

HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES, WILDLIFE, AND WATER

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

SEPTEMBER 16, 2003

ON

THE TOTAL MAXIMUM DAILY LOAD (TMDL) PROGRAM, SPILL PREVENTION CONTROL AND COUNTERMEASURE PLANS, STORM WATER ISSUES, WATER QUALITY TRADING AND THE NEGLIGENT VIOLATION SECTION OF THE ACT

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IMPLEMENTATION OF THE CLEAN WATER ACT

TUESDAY, SEPTEMBER 16, 2003

U.S. SENATE,
SUBCOMMITTEE ON FISHERIES, WILDLIFE, AND WATER,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:30 a.m. in room 406, Senate Dirksen Building, Hon. Michael D. Crapo (chairman of the subcommittee) presiding.

Present: Senators Crapo, Thomas, Wyden, Inhofe [ex officio] and Jeffords [ex officio].

OPENING STATEMENT OF HON. MICHAEL D. CRAPO, U.S. SENATOR FROM THE STATE OF IDAHO

Senator CRAPO. Good morning. The hearing will come to order.

This is a hearing of the Subcommittee on Fisheries, Wildlife, and Water on the Implementation of the Clean Water Act.

I would like to welcome everyone here, especially our Chairman of the full committee, Senator Inhofe. At the outset, I would like to recognize one of our witnesses, Dave Mabe, who is here from Idaho. David is the administrator of the Water Quality Programs for the Idaho Department of Environmental Quality. Senator Inhofe, Dave, and I worked together way back when I was in the State Senate in Idaho on issues of this kind. He brings a very high level of expertise to these issues. We welcome him here today.

Today, we are going to discuss a number of the aspects of the Clean Water Act. I will alert everybody at the outset that we expected to have votes this morning. We are going to try to keep everybody moving along appropriately so that we can get through all of the testimony and the questions that the members of the Senate have here today.

Although we all understand the fundamental importance of water, I do not think we should gloss over the importance of the Clean Water Act to our efforts. We should begin our discussion today by remembering that our shared goal is to continue improving the cleanliness of water throughout the United States, and do it by focusing on action and results instead of the endless arguments that sometimes I think we get into as a result of the implementation of some of the statutes.

The Clean Water Act is one of the statutes that allows a productive State and Federal relationship. It is important that we protect the basis for that relationship in the law, and that we use that relationship fully. By working together, State and Federal Govern-

ment can accomplish more and can discover more and better ways of sharing responsibility on all aspects of conservation.

To protect the State/Federal partnership, we should attend especially to whether and how the Federal partner should approve or disapprove of State decisions. In developing TMDLs, for example, State decisions, in my opinion, should be respected on which water body should be listed and what order they should be acted upon. On this and other specific issues, the Federal program should accept responsibility for difficulties we face in those contexts. By confusing effort with results, we often waste idle resources and gravely delay progress.

Today, as I believe everybody knows, we are going to go over four or five issues dealing with the Clean Water Act, TMDLs, pollution trading, storm water management, spill containment, and negligence standards. We expect to have many interesting perspectives on these issues raised to us by our witnesses who are here today. We look forward to their testimony.

With that, I will turn to our Chairman, Senator Inhofe, for his statement.

OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM THE STATE OF OKLAHOMA

Senator INHOFE. Thank you, Mr. Chairman.

First of all, good morning. I welcome everyone to this hearing today. I am very proud that we are joined, Mr. Chairman, by Steve Kouplen, who is the president of the Oklahoma Farm Bureau. He and I have had a chance to visit. He has a commercial Hereford cow/calf operation. He also grows wheat, alfalfa, and a few other things. He represents 140,000 Farm Bureau members in my State of Oklahoma.

Today's hearing will focus on several pressing clean water issues, some of which have been the subject of recent EPA actions. Of particular importance to my State, as you brought out, Mr. Chairman, is the future of the TMDL program, as well as how oil and gas sites are treated under the Storm Water Rule.

This Administration is absolutely correct in withdrawing the TMDL proposal of the Clinton administration. Many stakeholders, including the States, were concerned about a number of its provisions, including the requirement that an implementation plan be submitted along with the TMDL. The TMDL rule has the potential to severely limit local and individual land use decisions. A TMDL is a number. It is the maximum amount of a particular pollutant in a water body can sustain and meet the water quality standards. That number is then divided among the contributors of the water body.

The rule can be perceived in one of two ways: It gives the EPA authority to approve just the TMDL number with States deciding how to distribute it. Or, they could give the EPA the authority to approve how the State divides that number among its contributors. I have to say: What does it matter if they conform with the number? The States are probably in a better position to do that than we would be here in Washington. There is this prevailing mentality here, though, that no good decisions are made unless they are made in Washington.

Just imagine a farmer, like Steve Kouplen, who has been assigned a certain pollutant reduction to achieve. If he wants to change his crop or sell his land—all those actions may have a water quality impact and may cause him to exceed his pollutant allocation. The decision on what to do can be made between him, the State, and others, on the water body. But if the EPA has the authority over how the TMDL obligation is divided, that decision will be made by the EPA.

My message on the TMDLs is this: We need a new rule, but it must be a rule that outright prohibits any EPA role in local and land use decisions. We must give the EPA the authority to approve just the TMDL number itself and let the States handle the rest of it, along with the land owners.

Assistant Administrator Mehan has been a strong proponent of trading the EPA issued guidance earlier this year to help the States create trading programs. Trading allows one source to meet its obligation under the Clean Water Act by using pollution reductions created by another source that has lowered costs and, thus, can reduce pollution beyond its obligation under the Act.

A key objective to the trading guidance, and any trading program, is to meet water quality standards and to ensure that at the end of the day the water is cleaner and safer. That is what we want to accomplish. States have successfully developed programs to meet this objective, but also reduce costs. I believe trading will help reduce costs without affecting the water quality. Therefore, we should do all we can to promote it. We need to give the regulated more tools and not just more requirements.

Today we are also going to hear about two other issues that are very important to the small oil and gas producers in my State of Oklahoma. The Clean Water Act exempts uncontaminated runoff from oil and gas sites from the Storm Water Program. Contaminated runoff is still covered. The Act is silent on contaminated runoff. EPA, on a technicality, has included all runoff from oil and gas sites in the construction side of its Storm Water Program because the term "construction" is not in Section 402(l).

EPA made two mistakes. The first was failing to recognize that construction is not a separate part of developing oil and gas sites, and was never intended to be covered by the program. The second mistake was in underestimating the number of oil and gas sites that would be impacted by the rule. I am pleased that EPA realized the latter of their two errors and correctly proposed a 2-year delay, in part because their cost benefit analysis did not include the nearly 30,000 oil and gas sites impacted by the rule.

It is also important that we take a very close look at the Spill Prevention Control Program. Everyone must understand the SPCC Plans are required for any facility that houses large amounts of oil. This includes the Nation's farms. The new rule increases the number of facilities that need a plan by reducing the amount of oil that can be housed on a site before the requirement kicks in. The EPA granted an 18-month extension for facilities to comply because facilities were struggling to meet the new requirements, including how to address secondary containment at loading operations. I think it is very important that you keep in mind. I can see this

going to the extent that every farmer out there would be faced with this type of a site.

Another issue that will be raised today will be the unintended consequence of Section 309 of the Clean Water Act. Unlike other environmental statutes, including the Air Act, to be convicted of a negligent violation, a person does not have to be guilty of an intentional or reckless act. Such person, entirely by accident, without any force thought, and without any malice or intent, may have caused an accidental spill of some type and end up having to serve jail time. This is something that we do not want to allow.

I would like to ask unanimous consent to submit. One is a colloquy that Senators Breaux, Domenici, and I had during the floor debate on the Energy bill.

Senator CRAPO. Without objection, so ordered.

[Material supplied follows:]

COLLOQUY BETWEEN SENATORS DOMENICI, INHOFE AND BREAUX

Senator INHOFE. I would like to engage the gentlemen in a colloquy and draw the Senate's attention to several statutes which have been, through litigation, expanded beyond what we believe was the intent of Congress.

Senator DOMENICI. Is the gentleman referring to the criminal negligence provision of the Clean Water Act and the strict criminal liability provision of the Migratory Bird Act and the Refuse Act which can be triggered by a simple accident?

Senator INHOFE. Precisely. Now, I want to be clear that I do not want to suggest for a minute that we should make it easier for polluters to damage the environment or put the public at risk.

Senator DOMENICI. Out the situation you are talking about refers to clear accidents involving ordinary people, correct?

Senator INHOFE. Yes. Recent court decisions have made it clear that employees, at any level, who are involved in environmental accidents, can be prosecuted criminally, and potentially imprisoned. These are non-deliberate environmental accidents that do not threaten or harm others.

Senator BREAUX. Mr. President, I am also concerned about criminal liability as it applies to oil spills. In fact, during the 106th Congress, I introduced legislation to address a long-standing problem which adversely affects the safe and reliable maritime transport of oil products. The legislation was aimed at eliminating the application and use of strict criminal liability statutes, statutes that do not require a showing of criminal intent or even the slightest degree of negligence, for maritime transportation-related oil spill incidents.

As stated in the Coast Guard's environmental enforcement directive of 1997, a company, its officers, employees, and mariners, in the event of an oil spill "could be convicted and sentenced, to a criminal fine even where [they] took all reasonable precautions to avoid the discharge". Accordingly, responsible operators in my home state', of Louisiana and elsewhere in the United States who transport oil are unavoidably exposed to potentially immeasurable criminal fines and, in the worst case scenario, jail time. Not only is this situation unfairly targeting an industry that plays an extremely important role in our national economy, but it also works contrary to the public welfare.

To preserve the environment, safeguard the public welfare, and promote the safe transportation of oil, we need to eliminate inappropriate criminal liability that otherwise undermines spill prevention and response activities. I pledge my support to work with my colleagues to address these environmental liability issues.

Senator INHOFE. The American Waterways Operators have devoted a great deal of time to training mariners and vessel operators. Clearly, the Coast Guard goes to great lengths to ensure its officers and staff are well trained. However, unfortunately, accidents—true accidents—happen.

Senator DOMENICI. My colleagues are clearly describing a legal minefield where employees involved in an accident become less likely to cooperate with accident investigations because they are being advised by counsel not to potentially incriminate themselves.

Senator INHOFE. That is absolutely correct.

Senator DOMENICI. And as Chairman of the Environment and Public Works Committee, is it the Senator from Oklahoma's position that this leads to less environmental safety instead of more?

Senator INHOFE. Indeed. I also wish to draw the gentleman's attention to the Clean Air Act, which has a different, and I suggest, more appropriate provision of negligent endangerment.

Senator DOMENICI. I am familiar with the provision—it requires risk of physical harm to the public for an accident to trigger criminal prosecution.

Senator INHOFE. Yes, That is the type of activity for which we should reserve criminal prosecution. I also remind my colleague that the Clean Water Act clearly allows prosecution for deceitful or purposeful environmental damage, or for fraudulent efforts to conceal such damage—a provision we would not change.

Senator DOMENICI. I agree with the gentlemen's assessment, share their concern, and look forward to working with them to address this important issue.

Senator INHOFE. With that, I look forward to the hearing today.

Again, as the Chairman said, "We will be interrupted for awhile." We have three panels. We will make it as contiguous as possible.

Senator CRAPO. Thank you very much, Mr. Chairman.

Senator Jeffords.

OPENING STATEMENT OF HON. JAMES M. JEFFORDS, U.S. SENATOR FROM THE STATE OF VERMONT

Senator JEFFORDS. Mr. Chairman, I want to thank you for holding this hearing. Clean water is one of the most basic needs and one of our greatest luxuries. We are reminded time and time again of the role of clean water in our society as we see new coverages of the situation in Iraq.

In our own country, just a month ago, the effects of an unreliable power grid spilled over into the water industry as waste water treatment plants in Ohio dumped 60 million gallons of untreated sewage into receiving waters, closing beaches to swimming. Multiple cities were under boil water notices for days.

During the 107th Congress, as Chairman of this committee, I held a Clean Water Act oversight hearing on the 30th anniversary of the Act. We heard from the EPA that 45 percent of our waters cannot meet water quality standards. Since our hearing in October 2002, the Administration has chosen to go backward on clean water protections rather than forward. Rather than step up to the challenge of cleaning up our remaining waters, the Administration is both failing to maintain the progress we have made since 1970, and failing to move forward on the remaining challenges that we all identified just 1 year ago.

Today, we will review in detail the Administration's actions on TMDLs, Storm Water, SPCC, and water quality trading. We will also be covering the effect of Section 309(c)(1) which, Mr. Chairman, I understand that you have a special interest in that.

I ask unanimous consent, Mr. Chairman, that the testimony from Ms. Robin Greenwald in the October 20, 2002 article from the Environmental Law Reporter on this topic be included in the hearing record.

Senator CRAPO. Without objection, so ordered.

Senator JEFFORDS. I am pleased that we have agreed, at your suggestion, to address enforcement issues in general as a broad hearing on EPA enforcement in the near future.

I want to take a few minutes to provide some context for today's discussion on this limited number of actions the Administration

has taken under the guise of protecting our water quality. On January 15, 2003, the Bush administration began a rulemaking process that threatens the integrity of the Clean Water Act by severely reducing the water that it protects.

In June 2003, reports surfaced that Clean Water Act enforcement was faltering under the Bush administration. An internal analysis performed by the EPA documented extensive noncompliance with the discharge permits and a decline in enforcement activities. For example, there was a 45 percent decrease in EPA formal enforcement actions between 1999 and 2001.

Since President Bush took office, he has pursued significant reductions in the enforcement capacity at the EPA. Enforcement personnel have been reduced by 100. In January 2003, the President submitted his fiscal year 2004 budget. It reduced clean water infrastructure spending by 40 percent from the prior year funding level.

In March 2003, the Bush administration withdrew the existing rule on Total Maximum Daily Load, or TMDL, without producing an alternative. Today, we will review the Administration's latest draft regulation which weaken protections by the dirtiest waters. On March 7, 2003, the EPA issued a final rule that extended the permit deadline for storm water discharges for oil and gas construction activity that disturbs 1 to 5 acres of land by 2 years.

The EPA's action gives a regulatory free ride to the oil and gas industry while thousands of small communities and industries building construction projects struggle to comply with the same rule.

In a similar action to benefit the oil and gas industry, the EPA extended the compliance deadline for spill prevention control and countermeasures planned. We will discuss this in more detail today.

Mr. Chairman, I could continue with a longer list, but I will end there. Each time I review this list, I am dumbfounded by the casual attitude of this Administration toward the future of our country. It seems that the choices we witness each day are choices made with one thing in mind—immediate gratification to special interests at the expense of the environment. History will demonstrate that the changes I mentioned, taken as a group, will have been the largest step backward in clean water protection in our Nation's history.

Thank you, Mr. Chairman.

Senator CRAPO. Thank you.

Senator Thomas.

OPENING STATEMENT OF HON. CRAIG THOMAS, U.S. SENATOR FROM THE STATE OF WYOMING

Senator THOMAS. Thank you, Mr. Chairman.

I will not take very long. I do appreciate your having this hearing. I think it is very important. Seldom have I ever been optimistic about what we are doing with TMDLs. I think we need to be very watchful and careful about the storm water rule. I think we are headed in the right direction.

Thank you, Mr. Chairman.

[The prepared statement of Senator Thomas follows:]

STATEMENT OF SENATOR CRAIG THOMAS, U.S. SENATOR FROM THE STATE OF WYOMING

Mr. Chairman, thank you for holding today's hearing. I appreciate your commitment in allowing this subcommittee, which has jurisdiction over the Clean Water Act, the opportunity to discuss the implementation of that law particularly the rule on Total Maximum Daily Loads (TMDLs).

Mr. Chairman, I've sat behind this dais many times and rarely had the opportunity or reason to applaud EPA especially thinking back to the 2000 rule on TMDL's (that has since been repealed). But with respect to TMDL's and the existing rule, EPA has been helpful to my State of Wyoming. The national TMDL coordinator has worked with my state to achieve success through the local watershed process. Wyoming has been using a local approach to address our impaired waters rather than a top down approach. When EPA Region 8 was sued over Wyoming's alleged failure to comply with the TMDL program, the State prevailed.

The local approach is working. It is my hope the new rule will embrace this sort of an approach and allow other flexibilities to get the job done. If the end result is the same, I should not think a one-size-fits-all approach should matter. We have seen more than once that what works in one region in the country does not necessarily work in the other. Thank you, Mr. Chairman, and I look forward to hearing from the witnesses.

Senator CRAPO. With that, we will now move to our first panelist. Mr. Tracy Mehan is the Assistant Administrator for Water for the U.S. Environmental Protection Agency.

As Mr. Mehan is taking his seat, I would like to remind all of the witnesses today that we, as usual, are under a tight timeframe that will be impacted by votes. We will remind the witnesses that we would like you to pay attention to the clocks that are in front of you and keep your oral testimony to 5 minutes. That gives us time for questions from the Senators. We assure you that we will carefully review your written testimony.

Like I always say, you will never get everything you want to say in the 5 minutes, but we ask you to pay attention. For those of you that get involved and do not quite notice when you time is up, I will just lightly tap the gavel as a reminder that you should pay attention to the clock. We will try to keep ourselves moving along.

With that, Mr. Mehan, please proceed.

STATEMENT OF G. TRACY MEHAN, ASSISTANT ADMINISTRATOR FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. MEHAN. Thank you, Mr. Chairman.

It is a pleasure to be here. My written testimony deals with a broad array of watershed issues as well as the storm water issue, including TMDLs, watershed-based permitting, monitoring, and water quality trading.

I am going to focus in my 5 minutes on monitoring and water quality trading. While monitoring may not have been a top-of-the-mind issue for many, I think where we are today in trying to move to the watershed approach is crucial. You will be hearing a lot more of it as we move into the fiscal year 2005 budget process on this.

Again, we are in a period where we are trying to transition from a purely technology based approach to a water quality based approach, and to reorient all our water programs on a watershed basis. We think it is imperative to strengthen our water quality monitoring and assessment programs.

In the 1970's, monitoring was primarily carried out at or near the end of pipe to measure effectively individual permits and whether they were working. However, today we need to monitor and assess the inputs of millions of diffuse sources of pollution—from sediments, from agricultural sources, from construction sites, fertilizer, and pollutants coming from the air. This is going to require more innovative tools and flexible approaches such as trading. But we need baseline monitoring to better implement these new innovative approaches.

We currently have site-specific information that tells us about many localized and regional conditions. But as stated in EPA's Draft Report on the Environment 2003, "At this time, there is not sufficient information to provide a national answer to this basic question on water quality status and trends with confidence and scientific credibility."

Working with State, Federal, tribal, and local agencies, with the private sector and nonprofit organizations, we must be able to provide answers to some very fundamental questions: How clean is the water? Is it getting cleaner? Are our management actions working?

Without answers to these questions, we run the risk of flying blind when it comes to making decisions on how best to address water quality problems and to allocate limited resources. One recent example is the data we are assembling for our report to Congress under the Wet Weather Act on sewer overflow. When I came to Washington 2 years ago, we were talking about 500 billion gallons of overflow year. Based on a statistically valid inventory and sampling process, it looks like that number is dropping to 10 billion gallons per year. That has a big impact on how we decide how we are going to deal with these challenges. That is the kind of information we have to have.

Currently, most States are doing monitoring at that level. That is all to the good, but we need to integrate that as part of a national scale water quality monitoring program. Again, my testimony deals with some of the specifics on that. I hope in future hearings next year, that we will spend much more time on water quality monitoring because it is fundamental to innovation and the watershed approach.

Let me say a few words about water quality trading. EPA believes that water quality trading, which allows sources to find the least cost alternative to achieving clean water, can be a critically important tool for restoring impaired watersheds efficiently and cost effectively. In its analysis of the Clinton administration's Clean Water Initiative, EPA concluded that the total potential savings from all types of trading—point-to-point, point-to-nonpoint, and pretreatment trading—ranges from $650 million to $7.5 billion annually.

Another study of three watersheds in the upper Midwest by the World Resources Institute, found that controlling phosphorous loadings from point and nonpoint sources, the cost could be reduced by 40 percent in watersheds in Wisconsin and more than 80 percent in watersheds in Michigan where trading was applied between point and nonpoint sources. These examples, where differential costs can be used to the benefit of achieving water quality gain, illustrate the potential for water quality trading.

In January, EPA issued its Water Quality Trading Policy. The policy provides guidance on aligning trading programs with the Clean Water Act and implementing regulations. It identifies common elements of credible trading programs. The policy supports trading to improve or preserve water quality in a variety of circumstances.

In unimpaired waters, trading may be used to preserve water quality by offsetting new or increased discharges of pollutants, thereby allowing for economic growth in a watershed. In waters impaired by pollutants, trading may be used to achieve earlier pollutant reductions, and progress toward water quality standards even in advance of the development of a TMDL.

Trading, of course, may be used to reduce the cost of achieving reductions established by a TMDL. The policy highlights existing Clean Water Act flexibility that can facilitate trading programs, and emphasizes the need for accountability and safeguards to ensure the trading programs protect our resources and keep advancing toward water quality standards.

I am happy to note what I think is really growing support for the policy. We had a national forum on trading in Chicago this summer. Three hundred people showed up for several days. They came early and stayed late and explored a whole raft of case studies and lessons learned from trading pilots around the country. Recently, we received a letter from the U.S. Conference of Mayors endorsing our policy.

A number of core principles and environmental safeguards form the foundation of our policy. These principles help ensure the trading programs create actual pollutant reductions, avoid hot spots, provide accountability for trading activity, and involve the public. I am going to name just a few that are set out in the policy.

First, trading programs operate within the existing regulatory structure and are consistent with all aspects of the Clean Water Act. Trading programs are designed to meet water quality goals, including TMDLs. Water quality standards or goals are our polestar, that is, the end point, the object of all these efforts. Trading programs ensure that water quality standards are not exceeded. Trading programs retain enforceability of NPDES permit limits. Trading is not used to meet point source technology-based limits, but may be used to achieve water quality-based limits consistent with the Clean Water Act.

We already see evidence that water quality trading programs work. For example, the State of Connecticut's Nitrogen Credit Exchange Program is expected to save the State an estimated $200 million in control costs through trading, while also making significant gains in cleaning up pollutants in Long Island Sound, saving several years off the cleanup schedule.

In the Cherry Creek watershed in Colorado, a trading program conducted in conjunction with a TMDL has reduced phosphorous loads to Cherry Creek watershed by approximately 450 pounds per year. The nonpoint source projects that were implemented to create the phosphorous credits have provided ancillary environmental benefits, such as flood control and wildlife habitat in recreational areas.

A partnership trading effort in Illinois' Piasa Creek along the Mississippi River will save several million dollars in capital improvements for a drinking water treatment facility, while reducing sediment loads to the Mississippi River. The Grasslands selenium trading program in California, which was led by the Environmental Defense, was the Nation's first nonpoint source cap-and-trade program. It utilized an innovative penalty and rebate system to create economic incentives to substantially reduce selenium in Kesteron Reservoir that was adversely harming bird populations. I am also happy to recognize the project in Idaho along the Lower Boise that we are very excited about.

Experience with trading has also taught us that trading will not work everywhere. It is just one tool in the tool box. For example, the level of pollutant reductions that would need to be achieved from all sources in a given watershed may be such that additional or surplus reductions cannot be achieved so as to allow trading. Certain watersheds may not have the number and mix of sources necessary for trading to be successful. In addition, trading programs that work in one State or tribal area may not be successful in others.

Generally, Mr. Chairman, we are exited about the experimentation that is going on. We look forward to working with the committee to see that this policy is successfully implemented.

Thank you. I would ask that my complete testimony be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered.

Thank you very much, Mr. Mehan. We appreciate your testimony.

For my questions, I want to focus on the TMDL program. You and I have had discussions on this in the past. As you know, I was very concerned with the rule that was first proposed by the EPA under the Clinton administration. The testimony we had in the hearing was that it would not only impose significant increased cost burdens on the States, but not necessarily increase the effectively of the activities already underway at the State level. Therefore, I strongly supported the EPA's decision to withdraw that rule and start again.

Now, however, I am very anxious to see that a new rule come out. As we have discussed, the regulatory uncertainty that we face in the absence of a rule is itself creating a significant amount of problems.

In that context, my first question is this. Do you have a time line that you can give us as to how soon we can expect that the EPA will issue a new rule?

Mr. MEHAN. Senator, I am not in a position to give you a precise time line. I can tell you we are in an interagency process. There was a little bit of a quietus after the Fourth of July. I can assure you that we are back into long and steady negotiations and discussions with our other Federal Agencies. We are hopeful that we will be able to move forward in the not-too-distant future.

Senator CRAPO. In the context of the new rule, particularly in the context of the nonpoint sources, it seems to me that it is important for us to recognize the roles of the State in being able to allocate the total load to various sources within a watershed. The EPA

should be primarily involved in determining what the total load level should be, but should let the States make decisions about how that is allocated and how accomplishment of the purposes of the rule is achieved. Is that the direction in which we are headed?

Mr. MEHAN. We, I think we would view it as somewhat of a more complex challenge. In approving the total load, it is like approving a budget. You cannot really look at the bottom line without looking at all the elements that go into creating the budget, whether it is a pollution budget or a financial budget.

There has to be some mechanism for EPA to meet its statutory responsibilities to approve the TMDL to ensure that the allocations, both the waste load allocation to point sources and the load allocations to nonpoint sources, are actually put together in a technically and scientifically defensible way in order to justify our approval.

So we are wrestling with this issue of how to respect State prerogatives who at the first instance have the responsibility to put together the TMDL, but at the same time allow us to make an informed technical evaluation of the final work product.

Senator CRAPO. Are you saying that the EPA has to basically be in charge of every minute decision in terms of the allocation of the load throughout a watershed in order for them to make a decision about the total load for the watershed?

Mr. MEHAN. It comes down to what degree of specificity you need. You obviously have to have great specificity when you are talking about point sources because those waste load allocations to point sources will be written into NPDES permits. It would not require anywhere near the same kind of specificity for load allocations to nonpoint sources where you could do things through categorizations or sub-categorizations without necessarily worrying about specifics, say in the case of an agricultural producer or sources like that.

The issue is: How much specificity do you need to ensure a fair and credible technical review of the overall pollution budget in the TMDL?

Senator CRAPO. Well, my time is up. I will encourage you to work as much flexibility as possible into the program for the States and have the EPA mainly administering at the broader level and let our States do their jobs. I think they can.

Mr. MEHAN. Thank you, sir.

Senator CRAPO. Senator Jeffords.

Senator JEFFORDS. Has the EPA done any written analysis showing what the effect of the proposed changes, the TMDL rule, will be on water quality? In other words, does EPA's analysis show that a new rule will make the waters dirtier or cleaner, and sooner or later than the existing TMDL?

Mr. MEHAN. At least as I understand what you are asking, Senator, I do not think we have that kind of an analysis or document at the present time. The TMDL contemplated rule right now in many ways accomplishes several things. We are responding to criticisms from the National Academy of Sciences. We are trying to accommodate State practical implementation concerns. We are trying to optimize the performance of an existing program.

In other words, in many respects you can say that the cost of meeting the water quality standards of the Clean Water Act are already sunk costs, but now we are coming along with a new, proposed, or contemplated TMDL rule to just make the whole thing work more efficiently toward ends that are already set out by Congress and by our regulations.

We look at it as a way to better optimize the existing program. I hasten to add that the TMDL program is a very robust program right now. We have done 8,000 TMDLs to date and are spending quite a bit of time in the continuous improvement mode to continue to perfect the program while we are also going through the interagency discussions about a possible new rule.

Senator JEFFORDS. On March 10, 2003, the day the Storm Water Phase II regulations took effect, the EPA extended the compliance deadline for the oil and gas industry. We have corresponded extensively on the details of this issue.

I ask unanimous consent that several pieces of correspondence between the members of the committee and the Agency's responses be included in the hearing record.

Senator CRAPO. Without objection, so ordered.

Senator JEFFORDS. Your final rule extending the deadline for the oil and gas industry states that you have received information that 30,000 oil and gas sites could be affected. Is that number accurate?

Mr. MEHAN. That is our understanding.

Senator JEFFORDS. The final Storm Water Phase II regulation issued in 1999 states that "EPA believes that the implementation of Best Management Practices, BMP, controls at small construction sites will also result in a significant reduction in the pollutant discharges and an improvement in surface water quality."

Is that statement still accurate? If so, how will the removal of 30,000 sites from the regulation change the water quality benefits EPA expects to achieve?

Mr. MEHAN. Senator, taking the second question first, there is no decision to remove 30,000 sites from the rule. We simply deferred action on that sector in light of newer information received from the Department of Energy, from members of the industry, and through other sources that were inventoried as to extent of the potential regulatory universe that we previously had not fully understood or comprehended.

Generally, the imposition of BMPs on sources of storm water will have beneficial environmental impacts. But obviously issues of costs and benefits and issues in terms of regulatory feasibility are all relevant. We need to learn more about this sector. We also need to learn more about what the industry is already doing by way of best management practices under, say, State regulatory regimes at the present time.

Senator JEFFORDS. On the Storm Water EPA No. 3, can you describe the relative contribution of storm water versus other sources of pollution to the 45 percent of the Nation's waters that remain impaired, including a description of the types of pollutants normally found in storm water, and the change in pollutant content that could be expected in cold water climates? What role does transportation infrastructures play in generating storm water run off?

Mr. MEHAN. Obviously there are a number of points in your question, Senator, that I would request the opportunity to respond in writing in a very detailed technical review.

Basically, in the latest reports that we have seen from the States, urban run off was cited as the source of impairments for 34,871 miles of rivers and streams, 7.7 million acres of lakes, and over 5,000 estuary square miles.

Clearly, speaking again at the broader level, this has impacts. All the wet weather issues do, whether it is CSOs, SSOs, or storm water. You can go down the list. To some degree there is a hierarchy in there. Clearly, storm water run off is part of that. I would be happy to get back to you with more detail as to which sector contributes to which degree of impairments.

Senator JEFFORDS. We would appreciate that.

Senator CRAPO. Without objection, so ordered.

Senator JEFFORDS. Thank you, Mr. Chairman.

Senator CRAPO. Thank you very much, Senator Jeffords.

Senator Thomas.

Senator THOMAS. Thank you. I will be brief.

What if EPA's role was to reject indefensible State decisions rather than specifically approving all the decisions they make?

Mr. MEHAN. Senator, the present system set up under the Clean Water Act, and not unlike any other provisions of other laws, is really environmental federalism. Forty-five States presently have delegated authority to carry out the Clean Water programs. We do have an oversight role, but with the delegation of that program, primary responsibility for things like the NPDES program and the TMDL program, where quality standards are specifically recognized as State prerogative in Section 510 of the Act, the States are in the driver's seat.

We do have oversight responsibility. In some cases, say, in the water quality standards, the law requires us to approve those standards. We view the water program, compared to many programs in Government, and even in the EPA, as the quintessential environmental Federalist program with 45 delegated States in the Clean Water program and 49 States delegated under the Safe Drinking Water program.

There are obviously professional disagreements that will happen from time-to-time, but for 30 years, that has been the way we have carried out the program. We are seeing more and more reliance on State programs, even in the face of some financial challenges of late. You have to get to cases. There are going to be given circumstances where people are going to come down on different sides of any given decision.

Senator THOMAS. This is aside from your statement. But one of the things we run into quite often is a lack of coordination among Agencies; for instances, on permitting. One Agency will go ahead and say, "Yes, we are ready to go." Then the next thing you know, the EPA has challenged that. They have a perfect right to challenge it, but it seems to me that it would be appropriate if the Agencies work together so that when the permitting was finalized, then it is finalized, and someone does not come back in again and stop the whole thing because their opinions are not represented apparently.

Mr. MEHAN. Well, I think it is certainly just generally good practice that the further upstream you can get on any regulatory decision in terms of interactions, you are better off rather than sort of a late hit, so to speak. We do try. We spend a lot of time with our State agencies, whether it is under ECOS' or under ASIWPCA's umbrella, working with them on programs, trying to continually do a horizon scan of where we are going to see areas of potential disagreement or areas for potential cooperation and synergies. There is no question that we need to stay in a mode of continually trying to revisit these.

Senator THOMAS. I am not talking about the State. I am talking about Federal Agencies. I am talking about the BLM and the EPA who do not seem to be able to be in accord when the permitting is out there. It does not seem to me that there is any excuse for that.

Mr. MEHAN. The problem is that we are all creatures of the various laws that establish our Agencies. We do not have one comprehensive organic statute that cuts across all environmental and resource issues. We have different Agencies responding to different statutory and legal regimes. That inevitably results in some stovepiping. We are trying to improve on that at every opportunity. We have an oversight panel we have established with the Fish and Wildlife Service to look at the review of water quality standards under the Endangered Species Act, trying to again proactively work to streamline that effort. But again, you have two different statutory regimens.

Senator THOMAS. I understand that. But there is no reason why the final decision cannot encompass the decisions of both or all three of those Agencies. You always have reasons and excuses because of the law. But I am afraid I do not understand why it cannot be implemented in such a way that the final decision embraces the role of all the appropriate Agencies. But that does not happen.

Mr. MEHAN. I agree we need to make it happen, Senator.

Senator THOMAS. Thank you. I appreciate it.

Thank you, Mr. Chairman.

Senator CRAPO. Thank you.

Senator Jeffords has a few more questions.

Senator JEFFORDS. The trading policy states that EPA would consider pilot projects to obtain more information regarding the trading of persistent bio-accumulative toxics, PBTs, such as mercury. What are your plans with regard to these pilot projects? How could it be possible to increase the concentration of PBTs in one location without impairing water quality and putting human health at risk?

Mr. MEHAN. Well, Senator, we have no proactive plans or agenda to promote or push any trading involving persistent bio-accumulative toxics. That statement in the policy really is more of an in-box position that if someone comes forward, we would certainly examine it. We have one on the Sacramento River involving mercury. We intentionally put that statement in the policy to show that we were not hanging out a sign to necessarily promote this.

On the other hand, under the Clean Water Act, we do not have a handle under some of the primary sources, which are air depositions. That is the same analogy to row crop agriculture. One of the advantages of trading is that it presents an opportunity to address

unregulated sources through least-cost and incentive-based practices in a watershed context. We just did not want to foreclose the opportunity that someone out there might have a very creative idea dealing with a multimedia problem like mercury. Certainly in places like Michigan or the Southeastern United States, 90 percent of the mercury is coming from an unregulated source, at least from the Clean Water Act perspective; that is, air deposition. There are other areas, too, where it is coming from runoff and other things that are not subject to the traditional NPDES regulatory tools.

We have not had any new proposals come in other than the one we announced back in January in the Sacramento which is still more in a scoping stage. If one comes in, we will take a look at it on its merits and decide whether it is worth pursuing.

Senator JEFFORDS. The Storm Water Phase II final rule extending the compliance deadline for oil and gas states that EPA will analyze and evaluate the scope and effect of Section 1342(l)(2) of the Clean Water Act which allows certain types of discharges from oil and gas activities to occur within a permit.

I have several questions with respect to that. What is EPA's current policy on the applicability of Sections 1342(l)(2) to oil and gas construction sites? How long has that been in place?

Mr. MEHAN. I think you are referring to the 1992 decision by EPA to distinguish between runoff from the operations itself versus the construction. There has been no change on that policy as of this date.

Senator JEFFORDS. How has the Storm Water Phase I regulation covering large municipalities and large construction sites impacted water quality?

Mr. MEHAN. I have only anecdotal evidence. I would be happy to check to see what more systematic information we have on that, Senator. We are talking obviously larger operations on a watershed basis that could be significant.

Ms. Benita BEST-WANG [accompanying Mr. Mehan]. We have done some work evaluating monitoring data from large municipalities. We do have some work on construction sites.

Mr. MEHAN. Again, I would be happy to assemble that information and present it to you, Senator.

Senator JEFFORDS. Thank you.

Senator CRAPO. Without objection, so ordered.

[Material supplied by the witness follows:]

SOURCES OF IMPAIRMENT

EPA compiles data on water quality impairments and sources of impairments consistent with the requirements of Section 305(b) of the Clean Water Act. The most recent biennial report for which data are available is from calendar year 2000 (2000 National Water Quality Inventory Report). In that report, EPA presents data independently for three significant types of waterbodies: rivers and streams, lakes and reservoirs, and coastal resources. The report defines number of categories for sources of waterbody impairments. Many of these are storm water management related. Following is impairment data for each of the waterbody types:

RIVERS AND STREAMS

Of miles assessed, 39 percent are impaired (a total of 269,258 miles out of the 699,946 miles assessed). Of the total, following is the percent of the impairment due to the identified source:

Agriculture	48 percent
Hydrologic Modification	20 percent
Habitat Modification	14 percent
Urban Runoff/Storm Sewers	13 percent
Forestry	11 percent
Municipal Point Sources	10 percent
Resource Extraction	10 percent

While not clearly delineated as storm water sources, other than the municipal point sources, all of the other sources are likely heavily influenced by storm water runoff.

LAKES

Of the acres assessed, 45 percent are impaired (a total of 7.7 million acres out of the 17.3 million acres assessed). Impairment sources are as follows:

Agriculture	41 percent
Hydrologic Modifications	18 percent
Urban Runoff/Storm Sewers	18 percent
Nonpoint Sources	14 percent
Atmospheric Deposition	13 percent
Municipal Point Sources	12 percent
Land Disposal	11 percent

COASTAL RESOURCES

Of the square miles assessed, 51 percent are impaired (15,676 square miles out of 31,072 square miles assessed). Impairment sources are as follows:

Municipal Point Sources	37 percent
Urban Runoff/Storm Sewers	32 percent
Industrial Discharges	26 percent
Atmospheric Deposition	24 percent
Agriculture	18 percent
Hydrologic Modifications	14 percent
Resource Extraction	12 percent

Common pollutants found in storm water include pathogens, nutrients, sediment, oil and grease, toxic metals, and debris. In cold weather climates, road salts are an additional pollutant of concern that have been shown to impact water quality.

Transportation infrastructure plays a significant role in storm water runoff. Annual pollutant loads generated from roads and associated facilities were estimated as part of the Agency's ongoing effort to develop national guidelines for the construction and development industry (FHWA 1996, 2001, HUD 2002, USDA 2000, NWS). These estimates do not account for inplace management practices to control storm water runoff, but are for uncontrolled pollutant loads delivered to the nation's waterways. Some representative parameter estimates include:

Parameter	Annual loading (1,000 metric tons/yr)
Total Suspended Solids	4,000–64,000
Phosphorus	9–80
Oil and Grease	200–2,000

Parameter	Annual loading (1,000 metric tons/yr)
Mercury	260
Zinc	4.5–74
Cadmium	0–3
Arsenic	4.6–5
Copper	2–560
Iron	190–820
Lead	6–140
Chromium	0–3
Magnesium	85
Total Kjeldahl Nitrogen	28–4,400
Chemical Oxygen Demand	1,200–22,000

These national estimates are appropriate for assessing the overall magnitude of the potential problems generated by runoff from roads, highways, and related facilities. Nevertheless, it should be recognized that different pollutants are considered more significant based on the designated use of the receiving water body, among other factors. Aquatic life protection in streams will generally emphasize oxygen demand or metals; the effect of phosphorus is often the most important consideration in lakes. In general, the impacts of any typical runoff constituent have to be considered in conjunction with the type of receiving water, its use, and overall ecological health.[1]

Senator JEFFORDS. If EPA expands the application of this section to exempt the oil and gas industry, how will permit holders in the industry that have been regulated since 1990 be affected?

Mr. MEHAN. That is a hypothetical question, Senator. At this point, no such decision has been made. I am not in a position to speculate.

Senator JEFFORDS. With respect to TMDLs, what environmental effects would result from allocating a lump sum of gross load to nonpoint sources of water pollution instead of the more specific allocations?

Mr. MEHAN. Again, keep in mind that a TMDL does not create any new regulatory authorities, whether it is on air deposition, or row crop agriculture, or even the operation of dams. The power of a TMDL is in the information that it provides to stakeholders at a watershed level to be able to understand what is contributing the impairment of those waters.

My own preference, if I were back in the State government where I did spend 13 years, would be to have as finely differentiated data set as I could get so I could have a road map as to what needs to be done, either through voluntary approaches on the nonpoint source side, or subsidy approaches, or regulatory on the point-source side.

We could do a TMDL using strictly lump sum allocations to nonpoint sources. The problem is that you would not know if it

[1] U.S. Department of Housing and Urban Development (HUD). 2002. Housing Completions (as reported by the U.S. Census Bureau) Washington, DC. Available at www.census.gov.

U.S. Department of Transportation, Federal Highway Administration (FHWA). June 1996. Evaluation and Management of Highway Runoff Water Quality. FHWA Office of Environment and Planning. Washington, DC. Publication Number FHWA–PD–96–032.

U.S. Department of Transportation, Federal Highway Administration (FHWA). 2001. Highway Statistics 2000. FHWA Office of Highway Policy Information, Washington, DC. Publication Number FHWA–PL–01–1011.

National Weather Service (NWS). Hourly rainfall data, collected for selected sites within each of the 19 U.S. Ecoregions for the past 30 years.

U.S. Department of Agriculture (USDA), National Resources Conservation Service. 2000. 1997 National Resources Inventory. Washington, DC.

were good or bad without at least some degree of sub-categorization. That may not have to be in the TMDL itself. It could be in a sidebar submittal, if you will, or some other document that gives us the technical background. Many people are nervous about putting things in the TMDL because of regulatory consequences.

Again, I would come back to my initial comments. What we are wrestling with is what degree of specificity do we need to be able to make an informed technical evaluation of the quality of the pollution budget in the TMDL. Hopefully, we would keep in mind that it is utility to local stakeholders.

If we just only had a lump sum allocation for all point sources, we might be able to approve the TMDL, but it would be hard without some understanding of how that lump sum budget was put together from the bottom up, so to speak.

Senator JEFFORDS. Mr. Chairman, I ask unanimous consent that the letter that Senator Graham and I sent to the EPA on trading on July 17th of this year, and EPA's response be inserted into the record.

Senator CRAPO. Without objection, so ordered.

[Material supplied follows:]

October 6, 2003.

Hon. MARIANNE HORINKO, *Acting Administrator,*
Environmental Protection Agency,
Washington, DC.

DEAR ACTING ADMINISTRATOR HORINKO: Thank you for your July 17, 2003 response to our letter raising concerns regarding the Agency's failure to effectively enforce Clean Water Act requirements. We appreciate your detailed response to our questions regarding the Agency's plans to respond to the Environmental Protection Agency (EPA) Inspector General and the Office of Enforcement and Compliance Assistance (OECA) recommendations for improving the EPA's performance in enforcing the Clean Water Act.

We are concerned that your letter does not present a more aggressive approach to dealing with the substantial rate of non-compliance with NPDES permits. Your letter dismisses the 45 percent reduction in EPA formal enforcement actions by citing an undocumented redirection of resources to wet weather enforcement actions. The only significant step described in your letter to increase or change the enforcement program is the creation of a Facility Watch List, a useful tool, if it is actually used by decisionmakers to take enforcement actions. Below we are requesting answers to specific questions on the degree to which the Watch List has actually been implemented.

We are concerned that although the EPA provided a detailed response to our questions regarding the Agency's enforcement of the Clean Water Act, the EPA is not taking the steps that are needed to bring our Nation closer to the goal of clean, safe water.

WET WEATHER ENFORCEMENT

In your response, your letter indicates that the 45 percent reduction in EPA formal enforcement actions is, "due to the focus on wet weather related cases. . . ." In EPA briefings immediately following the release of the OECA report, the Agency indicated that it believed this to be the case and that the Agency would be conducting an analysis to gather data and information to support this belief. Based on the conclusions presented in the Agency's letter, we are assuming that the analysis is complete. Please provide a copy of the analysis, including a description of the wet weather enforcement cases pursued during the 1999–2001 period that led to the diversion of resources from the NPDES majors program and a comparison in terms of FTEs and other resources required to conduct an NPDES major enforcement action versus a wet weather enforcement action. In your letter, the Agency also states that it will be looking at the impact of wet weather events on CAFOs, CSOs, SSOs, and Storm Water, and the relative impact of these wet weather events on environmental degradation when compared to the noncompliance of NPDES major

permitholders. Please describe the results of this study if it has been completed, its scope, your methodology, and the intended use of the results.

State Role in Enforcement

Your letter describes the 9 percent increase in state formal enforcement actions as "encouraging." What analysis is the Agency conducting to determine the cause of this increase, and if this is a trend or an anomaly? What has the Agency done to encourage formal enforcement actions at the state level—for example, will the EPA seek to provide additional resources to states to increase formal enforcement actions? Has the EPA made a policy decision to pursue formal enforcement actions at the state level and informal enforcement actions at the Federal level? If so, please provide a copy of the decision documents. On a related issue, your letter states that during performance reviews, EPA will evaluate whether or not states are escalating enforcement actions and penalties over time. Has this occurred? If so, please describe the results of EPA's review.

FACILITY WATCH LIST

One of the major corrective actions that your letter states the EPA will be taking to improve enforcement is the creation of a Facility Watch List that will be used to target resources and enforcement actions at serious violators. We believe that this tool has the potential to improve enforcement if the decisionmakers who receive the watch list actually use it to prioritize enforcement actions. We understand that the first version of this list was scheduled for distribution to EPA Regions during the first 2 weeks in September. Please provide a copy of this list and a description of the enforcement actions that have begun since the Watch List was distributed. In addition, please provide a description of the difference between the Watch List and the Exceptions List previously in use at the Agency.

While the creation of the Watch List may address high profile, serious violators, it does not necessarily address the 51 percent of the facilities in Significant Non-Compliance (SNC) that do not recover without a formal action. Please describe how you will ensure that the full 51 percent of facilities in SNC that require a formal enforcement action to return to compliance actually receive one. For example, does the Agency intend to request additional funds in its Fiscal Year 2005 budget for this purpose?

Types of Significant Non-Compliance

Your letter makes an effort to distinguish between the different types of significant noncompliance as effluent-related, reporting, or schedule violations. In a system of compliance based wholly on self-reporting, it seems evident that the integrity of the system depends on the equivalent treatment of reporting violations and other types of violations. Does the Agency have a policy to treat different types of SNC violators differently? If not, is EPA considering adopting one?

DATA QUALITY

In addition, your letter describes the data quality problems that exist in the Permit Compliance System (PCS) data base. You state that EPA will encourage states to report penalty data prior to the implementation of the modernized PCS. What actions has the Agency taken to encourage the reporting of penalty data by states?

CHANGING PERMIT LIMITS TO IMPROVE COMPLIANCE

In a repeat of a pattern that is becoming all too familiar, your letter states that OECA intends to "have a dialog" with the Office of Water to explore the "problem" of extremely high exceedances of permit limits by pollutant dischargers that hold NPDES permits. The OECA report recognized that permit limits are established based on human health protections, but it also indicated that a dialog would address the question of whether permit limits are currently too high. Has this dialog begun and if so, what are your results to date?

FEDERAL FACILITIES' LACK OF COMPLIANCE

In response to recommendation #10 of the OECA report, you indicate that OECA will begin working with the Federal Facilities Enforcement Office to determine the root cause and possible solutions of the proportionately higher rate of non-compliance with NPDES permits among Federal facilities. Has this work begun and what are your results to date?

PROGRESS ON RECIDIVISTS

In response to recommendation #12 of the OECA report, your letter indicates that OECA has already begun reviewing the Agency's existing information on recidivists. Please describe the results of this effort—what behavior patterns among recidivists has the Agency identified and how do they compare to other types of violators?

PCS Modernization Effort

What is the status of the EPA's decision to potentially modify the scope of the modernized PCS data base?

There are several actions related to the PCS data base modernization that you identified in your letter as items to be completed by the end of September 2003. What is the status of the Agency's efforts to develop a realistic cost estimate for the PCS modernization effort, a cost-benefit analysis, and a plan for fully funding the PCS modernization effort?

Your letter indicates that 2 FTEs will be added to the PCS modernization effort. What is the timing for this change and what is the source of these FTEs?

Thank you for your prompt attention to this matter, and we look forward to your timely response.

Sincerely,

James M. Jeffords, Charles Schumer, Frank Lautenberg, Jon S. Corzine, Bob Graham, Joseph I. Lieberman, Hillary Rodham Clinton, John Kerry, Ron Wyden, Joseph Biden, Christopher Dodd, Russell Feingold, Max Baucus, Barbara Boxer.

Senator JEFFORDS. I have one more question.

Trading has been used successfully to achieve pollution reduction caps that are reduced incrementally and that have been used to create value in the credits, and to ensure that the overall result of the trading application of the program is a reduction in pollution. Because the water quality trading policy does not use caps, and you allow trading outside of a TMDL, how to do you intend to ensure that the cleaner water is a result of using the trading policy?

Mr. MEHAN. In the context of the Clean Water Act, the caps are the water quality standards. Some people are looking for the word "cap" in there. That may disappoint some. But the whole drift of the policy is to use, as I said, water quality standards, as our pulse star, as our object, as our limit our cap, if you will.

Whether or not you have a TMDL, you still have to respect and deal with the water quality standards. The analogous problem is trying to write a NPDES permit without a TMDL. If you have a narrative standard, you still can write a NPDES permit. It would be easier with a TMDL allocation. I will grant you that. But you can still do it.

We are not contemplating trading without the limitation of the water quality-based standard. Again, we do not allow trading just to meet the technology-based standard, but only to achieve the water quality-based standard.

Senator JEFFORDS. Thank you.

Thank you, Mr. Chairman.

Senator CRAPO. Thank you.

Senator Thomas, do you have any further questions?

Senator THOMAS. No, Mr. Chairman.

Senator CRAPO. Senator Wyden, do you want to ask any questions?

OPENING STATEMENT OF HON. RON WYDEN, U.S. SENATOR FROM THE STATE OF OREGON

Senator WYDEN. I do, Mr. Chairman. This is a matter of enormous importance to my hometown of Portland. I think Mr. Mehan

is aware of it. I will tell you, Mr. Mehan, I think the most charitable thing that I can say with respect to your policies in this area is that they are just absolutely incoherent. I want to see if we can make a little sense out of exactly what is going on.

We looked at the new report, the February 2003 report, on major facilities with waste water permit violations. The report that was done by the EPA Office of Enforcement and Compliance found that EPA frequently has tolerated significant violations of clean water permits by industrial polluters even in the case of repeat offenders. Your Agency, the EPA, found that in the past 2 years only 24 percent of the facilities in significant noncompliance received formal 25 enforcement actions.

This is what your Agency found with respect to major violators. At the same time, you are going gangbusters to come after our hometown that is working very hard to deal with enforcing the law and with your Agency. The city of Portland has had in place an enforceable agreement with the State of Oregon for more than a decade. Our city is already more than halfway toward meeting its goal of 96 percent reduction in sewer overflows. It is a more stringent standard than your enforcement guidelines. Our rate payers have spent more than $500 million to address the sewer overflow. We are getting clobbered in terms of these rates.

For the life of me, I cannot figure out when your own office is saying that you will not go after major violators, significant recidivists, with respect to Clean Water violations. Instead of targeting them, you are going after the people in my hometown. As you can probably tell, I have pretty strong feelings about this.

With the Chair's permission, I am going to ask you some detailed questions. This is of such importance to my constituents. Maybe you can just tell us generally this. What is the philosophy behind letting so many repeat significant violators off the hook, and then going after my hometown with hobnail boots when they are working so hard to be in compliance?

Mr. MEHAN. First of all, I do not mean to be the Artful Dodger here. I am in the Office of Water and am not in the Office of Enforcement. I will communicate your sentiments to my colleague, J.P. Suarez, the Assistant Administrator for Enforcement.

I am really not in a position to discuss the Portland issue. It is subject to litigation. It has been referred to the Department of Justice. I understand negotiations are ongoing. Again, this is carried on by our Office of Enforcement and not by the Office of Water.

As to your general point, we are concerned about the overall integrity of the NPDES program. Enforcement does begin with the NPDES permit. We are in the middle now of working with the States to put in place what we are calling a permit integrity program to begin to shore up the program which is getting a little frayed at the edges. We have 19 administrative petitions challenging our delegation of the NPDES authority around the country. We have had five lawsuits. We had a Federal judge in Indiana who was about ready to return the CAFO program. We have problems with Louisiana that we are working through.

Again, in the face of really financial stressful times with our State partners, we still need to return to the basics and shore up

the NPDES program. As to the decisions on enforcement, I must respectfully refer you to my colleague, Mr. Suarez on those.

Senator WYDEN. Just out of curiosity, are you telling the subcommittee, then, for the record, that EPA's Assistant Administrator for Water does not have anything to do at all—not from a policy standpoint, and not from any standpoint—with respect to how the Clean Water Act is enforced? Is that what you want to communicate today?

Mr. MEHAN. I deal with it at the front end in terms of the issues in terms of the functioning of the NPDES program. But I am never consulted on an enforcement action.

Senator WYDEN. I was expecting that you might say that this is not exclusively your providence, but do you not think it would be useful at the front end to say, "We are going to go after major violators," if the policy is to be to go after repeat major violators rather than to chase down a city that has an outstanding record in the environment and is doing somersaults to work with all of you to be in compliance?

That is a front-end judgment. It is my view that your office and the Agency has a stilted set of priorities, priorities that seem to me to just be incoherent. I would hope that using your front-end authority, as you could characterize it, you could send a message that it is time to go after major violators when people are trying to meet you more than halfway, that that be considered.

Mr. MEHAN. Let me clarify this. There is another front-end role that we play in the Office of Water in conjunction with our colleagues in Enforcement of setting overall priorities. While you can define a major violator in a lot of different ways—whether they are in or out of compliance or how many violations—we prefer to use a relative risk screen. Where we are in total agreement with the Office of Enforcement is that wet weather issues, specifically combined sewer overflow issues, rank at the top of the pyramid in terms of enforcement priorities. Without getting into the details of the Portland case, that is what is at issue in Portland.

Senator WYDEN. My time is up. I would only say that in your February 2003 report, you said, "Target polluters with the worst compliance records and without enforcement action."

By any stretch of the imagination, that is not my hometown. That is not. You can say that they have enforcement issues. We are not disputing that. That is why we are working hard to meet the Agency more than halfway.

But by your own report and by the own kind of central recommendation, you are honoring it more in the breach than in the observance.

I thank you for the time, Mr. Chairman.

Senator CRAPO. Thank you very much.

Mr. Mehan, we thank you for the time and effort you have made to be here before us today. We appreciate your attention to these critical issues.

Mr. MEHAN. Thank you, Mr. Chairman.

Senator CRAPO. Thank you.

We will call up our second panel. Dave Mabe, administrator, Water Quality Division, Idaho Department of Environmental Quality; Juli Beth Hoover, AICP, director of planning and zoning, city

of South Burlington, VT; and Michael Samoviski, city manager, city of Hamilton, OH.

While these witnesses are coming forward, let me remind you that we are probably going to be interrupted by a vote here. We are trying to keep everybody on time. Please pay attention to the clocks.

I have already introduced Mr. Mabe from Idaho. David, it is good to have you with us. Please proceed.

STATEMENT OF DAVID MABE, ADMINISTRATOR, WATER QUALITY DIVISION, IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

Mr. MABE. Thank you, Mr. Chairman.

My name is David Mabe. I am the administrator of Water Quality Programs at the Idaho Department of Environmental Quality in Boise. I bring greetings to you, Mr. Chairman, from Governor Kempthorne and from Director Allred.

I am testifying today to share with you the perspectives of the State of Idaho regarding the challenges that we face implementing the Clean Water Act and the need for regulatory or statutory changes to the program.

As background for what I am about to present, I would like to give just a brief overview of the implementation in Idaho of Clean Water Act programs. We have completed 484 TMDLs, primarily involving sediments, nutrients, and temperature, but we have also written TMDLs for other pollutants.

Next month, we will submit to the Environmental Protection Agency a revised 303(d) list done in the integrated report form, as per EPA's new guidance. It is set up in accordance with the EPA's new guidance regarding a five-part list. The call for data, public comment, and review was accomplished electronically. Our 305(b) report was submitted in electronic format. We are allowed now greater public access to this process than ever before.

Our monitoring program is designed to cover the State in a 5-year period using a probabilistic monitoring approach. This involves the development of random sites and then refines the areas in progressive years until the fifth year when we focus all the monitoring in those areas that we think have the highest probability of being impaired.

We are making the Clean Water Act TMDL process work in Idaho, but I believe there are some fairly simple changes to be made that could lower costs, make the process be more sensible on the ground, provide better environmental protection, and allow public participation in a more meaningful way.

The first of those is the listing, the delisting, or the 303(d)/305(b) process. We would like to support a longer schedule to comply more with our monitoring approach in the State of Idaho. We are suggesting a 5-year timeframe for reporting using the integrated report format. It is very difficult and expensive for us to do our monitoring in a timeframe less than a 5-year period.

Simply put, we do not have the budget to accomplish a statewide monitoring program in a timeframe of less than 5 years. In addition, many of the improvements that we look for in impaired waters are not going to be apparent in a 2-year timeframe. To report

on this shorter timeframe is not just meaningless. It is also becomes a burden to the process and to public participation in the process.

To give an example, in our first 2-year cycle, we would still be very early in the process of probabilistic monitoring. We would have no new data to report. At the end of the 4-years, the second 2-year cycle, we still have not completed the 5-year probabilistic monitoring timeframe and have no new data to report.

In the 6-year of a 2-year cycle, we have waited, in essence, 1 year longer than necessary to get the data out and report to the public on the changes in Idaho's water quality. Valuable staff time and resources are diverted to make two reporting cycles that really are relatively meaningless. By the time we do get around to that third reporting cycle where we have some things to say, I think public interest is going to be waning.

In recent rulemaking and guidance efforts, EPA has also supported a very important concept in reporting and differentiating between pollutants and pollution. We think that this help create a report to the public that focuses them on the issues that we can resolve with the TMDL process. These are pollutants that can be allocated and can be improved upon using the TMDL process.

Idaho is a State that is blessed with surplus water that we are able to use for irrigation purposes, and periodically those diversions can cause water quality problems. But those diversions are not something that can be quantified and solved through the TMDL process.

So the new listing and reporting format does give us an ability to report those problems, but not in the context of confusing the public that these are issues for which TMDLs can be completed.

It does, then, make the public aware of those issues. They can work with our Department of Water Resources, or agencies that do have authority to deal with those problems in resolving water concerns in those areas.

Another concept that is very important to us is to allow more flexibility in how pollutant loads are allocated. Currently, in both statute and rules, TMDL stands from Total Maximum Daily Loading. The rules have bent that just a little bit, trying to create a process that really works more sensibly on the ground. But I think that at some point we are going to be subject to legal challenges regarding that.

Pollutants, like sediment, are not loaded on a daily basis. Nonpoint source loadings are generally not occurring on a daily basis. They occur during storm events and occur periodically. The definition of a TMDL makes it very difficult to work with them.

The approval process is another issue that probably causes a great deal of waste in administration of the program. Currently, in the system EPA has to affirmatively act on standards, on TMDLs, and on other listing processes. I think that it is very important that each Agency involved in these listing processes is trying to create an administrative record. They are all subject to legal challenge. We are duplicating a great deal of work at the State and Federal level in creating administrative records.

In Idaho, industry challenges, or challenges from groups that want to see TMDLs that are less stringent, generally occur in State

court. Challenges that think we have not done enough will occur in Federal court. We are allowing different groups the kind of venue shop by having all these different agencies have an affirmative duty to approve. We would really like to see a process that changes slightly so that we can allow the Federal Agencies to object to issues where they feel there are concerns.

Thank you very much, Mr. Chairman, for the opportunity to testify. I look forward to working with the committee to resolve some of these issues. I would ask that my complete testimony be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered. Thank you very much, Mr. Mabe.

Ms. Hoover.

STATEMENT OF JULI BETH HOOVER, DIRECTOR OF PLANNING AND ZONING, CITY OF SOUTH BURLINGTON, VT

Ms. HOOVER. Good morning, Senators.

I am Juli Beth Hoover. I am the director of planning and zoning for the city of South Burlington, VT. Among my other storm water hats, I am the director of our Water Quality programs in South Burlington, and also the Chittenden County demonstration project through EPA's National Decentralized Water Resource Demonstration Grant Program.

Storm water pollution has become a major economic problem for Northwest Vermont. Basically everything that is subject to the Phase II regulations in Vermont drains into Lake Champlain. Whatever pollutants we put into Lake Champlain we then turn around and pay the Champlain Water District to filter and treat before it becomes our drinking water.

Therefore, with the cost to our recreation-based economy, and the cost of filtration, we are really finding in Vermont that implementing the Phase II program is a good investment, especially considering what we are investing in the GASB accounting standards. Spending between $4 and $12 per capita per year is really making sense, given the economic impact of storm water pollution on Lake Champlain and on our water filtration costs.

Being good Vermonters, we have aggressively looked for cost savings and achieved them largely through the use of inter-municipal agreements on everything from the legal work required to implement the program, to storm water mapping and planning, and also, very importantly, meeting the public education and public outreach standards.

We were concerned about the potential costs and drain on staff resources from that component of Phase II. We are pleased to say that we have managed to meet that in what we think will be a far more effective and certainly cost-effective manner through this inter-municipal agreement.

Our biggest initiative on storm water treatment, besides Phase II, is the use of decentralized or distributed storm water systems to deal with some of our most difficult and challenging storm water problems and economic problems.

Basically, decentralized or distributed systems, take land that no one really wants to build on, or could build on, and retool it to do something useful for water quality and for development. Last year,

Congress directed the EPA to try to spend $75 million of the over $1 billion in State revolving fund moneys on this type of distributed approach was to both storm water and to onsite septic systems.

I would like to encourage you to do more for this program which is extremely cost effective, extremely good for municipalities and businesses, and really terrific for clean water.

The picture on the left is the frozen tundra of Bill Shearer's Chevrolet on Route 7. Here it is on the left. This is not a picture we put on the postcards of Vermont. This is where we go to get our snow tires put on. Basically, Bill Shearer needed some capacity for storm water so he could expand his business, as did two of his neighbors.

The City and the Champlain Water District had a pressing interest in stopping the petroleum hydrocarbons and the other polluted run off from these auto dealerships and gas stations on Shelburne Road from getting into the Lake right near the intake for the water district.

So, with some creative head-scratching and engineering, Bill Shearer's back yard has become a 4-acre constructed wetland treatment system. We did not lose land for development and business growth. Instead, we gained the opportunity to grow Bill's business. Our monitoring this season has shown that we are getting excellent removal of these pollutants.

The problem is that this system cost $300,000. We had to scrape up 13 different grant sources to pay for it. Trying to administer 13 different grants will dissuade anyone from trying with this approach. Being stubborn, we are trying three more of these systems in other problem spots; nonetheless, through our demonstration grant through the EPA national program. This one will deal with runoff from commercial plazas at the interchange with the Southern Connector, using land that is currently used for the cloverleafs.

This one will use the land by an interstate on-ramp to support development of our city center. This one is planned in the city of Burlington on Engelsby Brook to remove pollutants that we know are causing chronic beach closures at Oakledge Park, which happens to be a block from my house. I am very tired of that "Area Not Recommended for Swimming" sign, especially in the middle of the summer.

Senators, we know that we have the ability through these decentralized systems to do a great job on water quality. We need a consistent, predicable, funding stream to do this, whether it is through a set-aside in the SRF, or expansion of storm water funding through the demonstration projects or other means.

Thank you. I look forward to your questions. I would ask that my complete testimony be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered. Thank you very much, Ms. Hoover.

Mr. Samoviski.

STATEMENT OF MICHAEL SAMOVISKI, CITY MANAGER, CITY OF HAMILTON, OH

Mr. SAMOVISKI. Good morning. It is a pleasure to be here. I am Michael Samoviski, city manager for the city of Hamilton, OH.

Hamilton is located in Southwestern Ohio. It has a population of 62,000 people. We operate our own treatment works and a separate storm water collection system. In compliance with the promulgated Phase II storm water rules, Hamilton did receive, under the NPDES, a general storm water discharge from it in April 2003.

To obtain this permit, we did develop a necessary storm water management plan which was submitted to the regulatory Agency in March 2003. The plan does encompass the six minimum controls mandated by the Phase II rules.

Hamilton's Council is seriously concerned about implementation and enforcement of this recently issued permit, especially in light of our very challenging local and State economic climates. As the City prepared its storm water management plan, it became apparent to the City Council that the costs associated with this implementation will have to be assumed by our local government, that is, our citizens and businesses since surplus municipal moneys for this purpose are nonexistent.

The City anticipates having to form and implement a storm water utility to achieve the necessary revenues to implement our plan. The charges will be based upon the amounts of impervious areas on various parcels of land. In Ohio, according to the Ohio Supreme Court, storm water fees of this sort, since they are utility charges, must be applied evenly and consistently without regard to tax status or land use. This means that all residents, businesses, schools, governmental and institutional complexes will be subject to these charges without exception.

Each residential unit would certainly pay a flat monthly charge, but the nonresidential units would pay a much higher charge based on the larger expanse of impervious areas. Hamilton's projected annual expense attributable with complying with the Phase II program is an additional $1.6 million over the $800,000 that the City now spends on storm water activities.

Since Phase II is a federally unfunded mandate, the City expects to have to raise this revenue by imposing a monthly fee of up to $550 on residential customers, and a multiplier effect on nonresidential users.

A few examples will illustrate our point. Hamilton's First Baptist Church was determined to have an impervious factor of 68 times that of a single equivalent residential unit, or ERU. The Church's expected storm water utility charge would be $374 per month.

The Smart Paper Company, a manufacturer of high quality papers, has an impervious factor 912 ERUs. Its monthly charge would be $5,017 per month. Our local high school has an impervious area equal to 243 ERUs. Its monthly charge would be $1,338. It goes on with other related examples.

The federally unfunded mandate is being imposed upon local communities at a time when our economies are stagnant and our Nation is facing huge deficits. Hamilton is no exception. Local budget deficits are already predicted for 2004, and the State's budget is in such distress that no funding for cities is available for Phase II compliance.

Now is not the time for distressed cities, such as Hamilton, to impose a new monthly storm water utility charge across our community to achieve Phase II compliance. When the local economy

improves, Hamilton's businesses and citizens may be better able to absorb this type of fee.

In our currently flagging economy, however, our local businesses cannot afford this additional expense, nor can our citizens who have very recently been called upon to take on more of the public safety burden by paying higher taxes for police and fire fighter staffing.

Accordingly, the city of Hamilton respectfully asks that you, our elected Federal representatives in Washington, commence action before Congress to enact a 5-year moratorium. This moratorium could postpone the unfunded mandate to a time better suited for requiring communities, such as our distressed city, to step forward and implement the Phase II rules.

The city of Hamilton is not seeking to avoid serving as a good steward of its river and receiving waters, but we are concerned public officials seeking to strike a reasonable balance between the stark reality of our current depressed local economy and continuing environmental improvement.

Thank you again for your attention and courtesy in allowing us to address this committee. We were honored to receive your invitation to appear and present our concerns. I would ask that my complete testimony be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered. Thank you very much, Mr. Samoviski.

I will advise everybody that the vote that was going to be at 10:30 a.m. has been delayed until 11 a.m. We have a reprieve for a short time, but it is still going to happen to us.

Let me start out with a question with you, Mr. Mabe.

Mr. Mabe, as I listened to your testimony, it became evident to me that a number of the concerns that the State of Idaho sees with the implementation of the TMDL process have to do with process—the monitoring process, the approval process, and the like.

Could you just quickly summarize what the best income outcome would be in terms of improvements? Please hit just three or four of these things. Please summarize them so we have a short list of what really needs to be done in terms of improvements in the process.

Mr. MABE. Mr. Chairman, I would be happy to. I think if I could make the changes in the new rule that we would look forward to effectively operate the program, we would change the listing cycle to a 5-year cycle. We would clarify the concept of pollutant loading so that it is not a daily load; that it is just any qualified load that fits the pollutant and the situation within the watershed. Then we would change from an affirmative duty to approve standards, TMDLs, and reports to give EPA the ability to object to a scenario that they do not think is being protective or implementing the Clean Water Act, to try to remove some of that administrative burden.

It is the process that tends to bog us down and cause most of the disagreements in getting watershed planning done and getting it implemented on the ground.

Senator CRAPO. Thank you. You heard the questions I asked of Tracy Mehan about the new rule and the context of the EPA being involved more at the level of determining the overall load for a wa-

tershed, or for an area under discussion, and letting the States then allocate properly.

I am sure you heard his answer as well. As I heard him, he said, "that is hard to do because in order to determine the overall load, they have to determine how it is allocated." Could you comment on that issue?

Mr. MABE. Mr. Chairman, I think there are clear roles for EPA and for the States. EPA has, I believe, four staff in the State of Idaho. The State of Idaho has about 200 staff working in the water quality program. The actual on-the-ground work with stakeholders needs to be done at the State level—to develop those allocations, to do the monitoring, to determine what standards should be applicable. Those should be worked on by the State. That should be subject to EPA approval and should be subject to appropriate schedules. But in order to actually accomplish the work of writing TMDLs, and of implementing TMDLs, the State is really the only logical entity to perform that.

Senator CRAPO. How would we respond to the EPA? Let us take the fact that right now they have four employees who are going to have essentially approve the work of 200 people working at the State level. It seems to me that there has to be some point at which the EPA adopts or delegates in some context so that the work of the State is accepted.

Is that happening now?

Mr. MABE. Mr. Chairman, it is an improving relationship, but still a very difficult one. They are trying to create an administrative record on every decision that they can defend. So if we submit 12 or 14 TMDLs a year, that small number of staff are trying to review and approve each of those TMDLs and create an administrative record where they can defend the challenge.

That, I think, is the main point that I would bring today. If we could shift that burden a little bit and let them focus on what they think the priorities are, and a scenario where they could object to work that they find substandard, and not have to go through the motions of approving and creating substandard, and not have to go through the motions of approving and creating administrative records for the work which they believe is adequate.

Senator CRAPO. So for the purposes of preparing against potential litigation, they have to make it a reality that they redo the work of the State of Idaho?

Mr. MABE. They have to create an administrative record upon which to base their decision and be able to defend that in court. I think that really is the rub. They start to question a great deal work that has been done. They start to redo or reanalyze decisions that have been made. It really slows the process down. They are just not staffed to make decisions at that level.

Senator CRAPO. All right. Thank you very much.

I would just like to say to Ms. Hoover and Mr. Samoviski my time is up. I really appreciate your testimony. You have raised very interesting options that we need to pursue here more aggressively. These are interesting and disturbing issues that we need to address. I just want to let you know that we are paying very close attention to the issues that you have raised.

Senator Jeffords.

Senator JEFFORDS. Thank you, Mr. Chairman.

Ms. Hoover, thank you for an excellent presentation. There was a lot of work putting that together. I deeply appreciate what you have done and your community for what they have done.

Can you describe the impact of storm water runoff from transportation infrastructure on your community's overall storm water program? Do you believe that your situation in Vermont is similar throughout the country?

Ms. HOOVER. The impact of transportation infrastructure is huge, just in terms of the sheer amount of imperious surface and runoff and the nature of the runoff it creates. South Burlington, of course, as you know, is one of the more heavily urbanized areas. The impact is consistent throughout Chittenden County, and probably a little less so in the rest of Vermont, except with places with an interstate highway running through it.

The good news is that the land associated with our transportation infrastructure—cloverleafs, on-ramps—tends to be outstanding for use for decentralized storm water treatment. The transportation enhancement program is starting to fund the use of transportation enhancement dollars to do storm water management in these transportation-related lands. That is a trend that we would like to see continued to really deal with the impact of transportation on our communities.

Senator JEFFORDS. How do the costs described by your colleague from Ohio for storm water management compare with the costs you are projecting for South Burlington? What are some of the possible reasons for the differences?

Ms. HOOVER. Among the towns in Vermont subject to Phase II, only South Burlington is looking at a utility. Our projected costs at this point are about one-third of what my colleague from Ohio is projecting.

I suspect that the State enabling legislation for utilities and utility fees has a great deal to do with that. Storm water utilities tend to be a different animal from conventional centralized water and sewer utilities where the user rate gets applied across the board. We certainly have been working with the Vermont legislature to deal with that in an appropriate way to make sure that we can keep the costs down and exempt those properties that need to be exempted.

Senator JEFFORDS. Thank you very much. It was very wonderful testimony.

Mr. Samoviski, did you use a contractor to develop your storm water management plan? What role is that contractor playing in the implementation of your plan?

Mr. SAMOVISKI. Yes, we did hire a consultant to advise us and to work through the planning of the storm water management plan. They developed a comprehensive program identifying the issues for our community which is an aging industrial community. The consultant has advised us continuously through the process and has been working with our Department of Public Works to oversee the implementation of the program.

We intend to use a variety of consultant services as we get into the necessary steps of monitoring our local commitments to the storm water regulations and controls. We will continually use that

consultant to upgrade our plan and to evaluate some of its effectiveness.

Senator JEFFORDS. Mr. Mabe, I want to compliment you for your testimony, too. I do not have a question for you.

Thank you, Mr. Chairman.

Senator CRAPO. Thank you very much. I appreciate this panel's testimony. Again, as I said, your written testimony will be a part of the record. You have provided some very valuable insights as we look at how we can approach this legislatively and through our oversight. Thank you very much.

Mr. MABE. Thank you.

Ms. HOOVER. Thank you.

Mr. SAMOVISKI. Thank you.

Senator CRAPO. We will call up our third panel now. We will try to get through as much of the panel as we can before the vote is called.

We have Steve Kouplen, president, Oklahoma Farm Bureau; Michael R. Lozeau, attorney, Earthjustice; Lee Fuller, vice president, Government Relations, Independent Petroleum Association of America; Rena Steinzor, professor and director, Environmental Law Clinic, University of Maryland School of Law; and Jim Hall, principal partner, Hall and Associates.

Let us go ahead and begin with the testimony.

Mr. Kouplen, would you please begin?

STATEMENT OF STEVE KOUPLEN, PRESIDENT, OKLAHOMA FARM BUREAU

Mr. KOUPLEN. Thank you, Mr. Chairman, and members of the subcommittee. My name is Steve Kouplen and I am the president of the Oklahoma Farm Bureau. It is a pleasure to be here with you today and talk with you about a couple of issues that are important to agriculture and dealing with water.

On July 13, 2000, the EPA published final regulatory requirements for establishing Total Maximum Daily Loads under the Clean Water Act. The Farm Bureau strongly opposed those regulations, as we believe that they exceed the Agency's authority under the Clean Water Act.

One of the most disturbing aspects of the now-withdrawn July 2000 rule was the Agency's conversion of the TMDL program into a nationwide enforcement mechanism for all sources of pollution, both point and nonpoint sources. We believe that the TMDL program should respect the practical and legal differences between point and nonpoint sources.

As the Clean Water Act has recognized for 30 years, the availability of endo-pipe technologies for point sources has made a precise command-and-control strategy feasible. Nonpoint sources, on the other hand, cannot rely on any comparable technologies and must, therefore, use less precise and more subjective best management practices to achieve load reductions. Given the inherently less predictable results of the measures available to nonpoint sources, a command-and-control strategy for nonpoint sources has never made any sense.

Congress went to great lengths in the Clean Water Act to ensure that the EPA did not mettle in local land use decisions by dele-

gating nonpoint source control to the States in Sections 208 and 319. The 2000 rules undercut this approach and allow EPA to prepare implementation plans that dictate how and when nonpoint sources can use their land. States should have the freedom to implement their TMDL programs at their discretion.

The fundamental balance of State and Federal control requires that EPA ensure that the ultimate goal is properly defined, but that the States alone determine how the goal will be achieved. Thus, States, not EPA, must determine how loading capacity will be allocated among the various pollutant sources. Such highly subjective decisions necessarily require balancing the needs of competing land uses based on considerations of equity, economy, and public welfare.

As such, allocation decisions are the essence of implementation planning that has been strictly reserved for the States. We urge EPA to address this issue and the rulemaking on the TMDL rule.

In relation to the oil spill final rule impact on agriculture, EPA's July 17, 2002, Oil Spill Prevention Control and Countermeasures Rule will negatively impact farmers and ranchers and their cooperatives across the country. While the subsequent January 9, 2003, rule providing an 18-month delay in the implementation allows for more time to prepare, it does not reduce the overall cost or impact.

There is now a growing realization across the country that the oil spill rule and program will greatly affect agriculture. Farmers and ranchers need to store fuel on their farms in order to control costs and to fulfill time-sensitive production operations. Many farms, especially in the Western States, require more than the regulatory threshold of 1,320 gallons of fuel storage for their operations.

On many larger farms, the fuel storage is not in one single location. Above-ground tanks are placed where needed on the farm for efficient equipment operation. These may be miles apart. Given the dispersed nature of the farm fuel storage and the costs associated with following the rule requirements for containment, integrity testing, security, and plan development.

We believe that the threshold level is inappropriate for the family farm and for those storages where a spill would have no impact on water quality. In addition, the aggregation of many smaller tanks, often in dispersed locations across farms and farmland, must also be addressed so as not to place farms in a costly regulatory program where there is no threat to water quality.

The concerns about the impacts of oil spill rules warrant a complete review of the final rule as it impacts agriculture. EPA should address agricultural storage differences in a manner that allows the farm and ranch community to protect water quality in an economically and environmentally sound and effective manner. EPA should look to the USDA for appropriate conservation practices and technical support to address the oil spill issue and other water quality issues with Agriculture.

We support using our U.S. Department of Agriculture Conservation Programs, such as Environmental Quality Incentives Program and the Conservation Security Program, to help the agriculture protect and improve our water quality.

Mr. Chairman, I thank you for the opportunity to be here. I would ask that my complete testimony be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered. Thank you very much, Mr. Kouplen.

Mr. Lozeau, please proceed.

STATEMENT OF MICHAEL R. LOZEAU, ATTORNEY, EARTHJUSTICE

Mr. LOZEAU. Thank you, Mr. Chairman. Good morning, Mr. Chairman, and Senator Jeffords. I thank you for inviting me here today to testify to assist the committee in overseeing the current Administration's implementation of the Clean Water Act.

I would like to discuss the latest in a series of efforts by the current Administration, described earlier by Senator Jeffords, of weakening the effectiveness of the Clean Water Act and providing us some insight as to the full scope of the Administration's efforts to undermine one of our most critical and most successful environmental laws.

I will be discussing Total Maximum Daily Loads for the most part, which is a key part of the Act's comprehensive program, and an essential element of how Congress envisioned the Act would work. It is based on common sense, focusing all the Clean Water Act's tools on a particular threatened or impaired water volume, and having them work in concert to effectively and efficiently protect that water body.

The TMDL program currently is the best hope to eventually achieve these as yet unattained goals of the Clean Water Act only by addressing all sources of pollution and assuring that every source control their share of the pollution. Will water quality be restored and protected?

The existing TMDL regs, which were put in place by the Reagan Administration and the first Bush administration, as late as 1992, have begun paying off. The rate of TMDLs being established is accelerating. The 1992 regulations have created considerable certainty in the TMDL program. The States are beginning to understand how the process works, as well as the dischargers. However, EPA's draft TMDL rule now threatens to undermine that progress and undermine the certainty that was achieved over the last decade.

EPA's draft TMDL rule, if enacted, will undermine the TMDL program in clean water by eliminating large number of waters from the benefits of the TMDL program. For those impaired waters left on the left, it would transform the TMDLs into meaningless numbers, devoid of specifics, and with only a vague relationship to the water body and pollution sources it claims to be cleaning up.

EPA proposes, for example, to limit the waters to be protected by TMDLs by suggesting a complicated mix of five categories of waters, only one category of which would require TMDLs. The other four, in essence, exempt waters from the TMDL program. Unfortunately, EPA's listing scheme would exempt waters that Congress intended to be included in the mandatory TMDL program.

I would just focus on Category 4(b) which is a category of waters that is identified by the Agency as impaired, but for which EPA or

the State has identified some programs other than a TMDL that they claim will cleanup those waters. As a legal matter, these impaired waters meet the criteria for listing and must be slated for TMDLs.

Second, the open invitation for EPA to the States to rationalize not listing these impaired waters based on alternative programs invites confusion and invites challenges from all sides. These are programs that as of that listing decision obviously were not working. That is why the water was impaired.

This is the exception that may have swallowed the rule. I think we will find States trying to fit as many impaired waters as they possibly can into this one category in the hopes of getting out from the TMDL obligation.

In regards to the substance of the TMDLs, EPA claims that the Agency does not have to review TMDL's pollutant loading allocations, and that these unreviewable allocations can be done by the States as gross allocations.

Without reviewing and approving TMDL's allocations of pollutant loadings for specific sources, there is simply no way for EPA to say in any rational way that it is implementing the standard created in the statute. That standard is that the TMDL must be established at a level necessary to implement applicable water quality standards. Those standards apply throughout a watershed, not just at some arbitrary downstream point.

Also, by lumping together a bunch of discrete sources and treating them as one through a gross allocation, EPA will render any efforts at trading within that watershed ineffective without discrete credits. For discrete individual sources, no trading will be possible.

EPA claims to be clarifying the TMDL program. I believe the opposite is true. If enacted, widespread uncertainty will result and we will see more and more challenges to TMDLs by both dischargers and by citizens. The rules would undermine existing permits that have been the most notable success story under the Act. For the many water bodies that have yet to achieve even the fishable and swimmable standard, in essence the rule would have us go back to the 1960's, before the 1972 amendments, to programs that have not worked in the past. History shows us that that is the road to increased pollution and increased impaired waters.

I would like to mention quickly two other issues that are before the committee today. One is the oil and gas extension, the 2-year extension from the Storm Water Phase II regs for oil and gas drill sites. I believe that decision was a mistake. Section 1342(l)(2) clearly does not create any kind of blanket exemption for that kind of drilling or for the pollutants that are discharged. Sediment and erosion from such sites affects our waters in the same way as sediment and erosion from any site.

In terms of the SPCC rules, we certainly are concerned, especially with the apparent conversations going on and negotiations stemming from the challenges the oil and gas industry filed to those rules regarding the extent of jurisdiction of the regulations to waters of the States. I would certainly voice our concern there, as well.

Thank you, very much. I would ask that my complete testimony be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered. Thank you very much, Mr. Lozeau.

Mr. Fuller.

STATEMENT OF LEE FULLER, VICE PRESIDENT, GOVERNMENT RELATIONS, INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

Mr. FULLER. Thank you, Mr. Chairman. Today I would like to address two issues under the Clean Water Act—storm water permitting requirements and new SPCC Plan requirements. However, before addressing these regulations, I want to discuss the role of the independent producer in domestic production because these producers are the most significantly affected.

Independent producers are engaged essentially only in the exploration and production, or E&P phase, of the industry. There are about 7,000 of them, and they average 12 employees. Over the past 15 or more years, the domestic E&P industry has changed significantly. Independent producers now develop about 85 percent of the wells in the United States, producing 75 percent of domestic natural gas and about 60 percent of the crude oil in the lower 48 States. This role will continue to grow.

Another important issue is recognizing the role of marginal wells. Marginal oil wells average about 2.2 barrels per day. However, collectively they produce about 20 percent of our domestic oil, an amount roughly equal to what we have been importing from Saudi Arabia. Marginal natural gas wells account for roughly 10 percent of domestic production. Of the 876,000 producing oil and natural gas wells in the United States, about 650,000 are marginal wells. These wells are the most economically vulnerable to price reductions or cost increases. Consequently, when independent producers look at these EPA regulations, at issue is the effect that they will have on reducing new production, or shutting down existing production.

Turning first to the issue of storm water permitting for facility construction, independent producers believe EPA incorrectly interpreted the Clean Water Act. The 1987 Act Storm Water provisions have become inappropriately intertwined. Section 402(p) directs EPA to require permits for storm water discharges under the NPDES permitting program. At the same time, Section 402(l)(2) specifically excludes discharges of storm water runoff from the E&P facilities unless the discharge is contaminated by contact with, for example, products, byproducts, or wastes.

IPAA believes that EPA has erred in its interpretation of the Clean Water Act with regard to the relationship between these sections. Congress spoke directly to the exclusion of storm water related to E&P facilities in Section 402(l), the specific statutory exclusion it should control.

Nevertheless, through a series of disconnected events, EPA has pulled E&P construction into the scope of its storm water permitting program. As a matter of law and policy, EPA should evaluate the environmental risks and regulatory burdens created by its actions. In this case, IPAA does not believe that EPA made a reasonable assessment of either the risk or the burden.

No where in the information that IPAA has reviewed, is there is an indication of significant environmental risks associated with E&P facility construction, nor is there any indication that EPA understood the burdens this program would impose. Recently, EPA deferred until March 2005, the Phase II Storm Water permit deadline for E&P facilities that disturb less than 5 acres of land area.

In the meantime, EPA will have an opportunity to consider whether there are alternative approaches that might be consistent with EPA's statutory authority and that would be consistent with the environmental impacts of construction of these facilities and minimizing the regulatory burden. IPAA believes this action is essential.

Finally, let me turn to the SPCC Plan regulations. SPCC Plans have been required for several decades. Those Plans are in place. Moreover, the Plan requirement is separate from any spill reporting and response requirements. Those responsibilities exist whether the facility has a SPCC Plan or not.

So at issue is whether the new requirements are necessary, appropriate, and cost effective. From an IPAA perspective, IPAA believes they are not.

IPAA is unaware of any extensive information indicating that existing SPCC Plans have systemically failed. But the new regulations would require extensive and costly plan revisions. IPAA believes that if there are elements of E&P operations where the planning process can be improved, those should be identified and a cost-effective method should be developed to address them.

This is far different from the current regulations that are prescriptive regarding specific planning actions, including construction of certain containment structures. EPA has extended the compliance date for its new SPCC Plan regulations for 18 months. IPAA supports this extension and hopes that it will be used to reconsider both the scope and the approach to SPCC Plan development.

The Clean Water Act generates many regulations to improve water quality in the United States. But it is essential that regulations target issues where action is truly needed and that they are cost effective. These regulations do not meet these tests. Moreover, they pose a significant risk to the development of new domestic oil and natural gas resources and the continued operation of existing production. In each case, EPA needs to reconsider its actions.

Thank you very much. I would ask that my complete testimony be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered. Thank you very much, Mr. Fuller.

Ms. Steinzor.

STATEMENT OF RENA STEINZOR, PROFESSOR AND DIRECTOR, ENVIRONMENTAL LAW CLINIC, UNIVERSITY OF MARYLAND SCHOOL OF LAW

Ms. STEINZOR. Mr. Chairman and members of the committee, thank you for the opportunity to appear before you today on behalf of the Center for Progressive Regulation to testify regarding EPA's implementation of the Clean Water Act.

CPR is an organization of academics specializing in the legal, economic, and scientific issues that surround health, safety, and

environmental regulation. This committee deserves much credit for recognizing the importance of the topics you consider today, especially environmental enforcement.

Deterrence-based enforcement lies at the core of an effective regulatory program designed to maintain and improve water quality. Yet, congressional oversight of EPA's enforcement record has been sporadic, and without such oversight, it is difficult to hold the Agency accountable for keeping the environmental cop on the beat.

There are ample signs that the environmental cop is not only off the beat; he is asleep in his cruiser. The latest numbers indicate a precipitous decline in every measure of enforcement effectiveness from cases brought and penalties paid to staffing levels. The number of EPA inspection and enforcement staff has fallen to its lowest level since the establishment of the Agency, dropping by more than 12 percent since the Bush administration took office.

Violators have paid 64 percent less in fines for breaking environmental laws during the first 2 years of the Bush administration than they did under the Clinton administration. The average civil penalty paid by polluters has dropped more than 50 percent, and the money spent on supplemental environmental projects has dropped by 77 percent.

In the Clean Water Act area alone, the number of inspections declined by 8 percent. There was a 50 percent decrease in the number of informal enforcement actions, and a 45 percent decrease in formal actions. Despite this disgraceful track record, as Senator Jeffords mentioned earlier, the Administration's 2003 budget request eliminates 200 enforcement personnel.

These changes are not abstract. They directly threaten water quality and hurt people. As just one example, an EPA analysis concluded that 13 percent of major sources emitting toxic pollutants into the Nation's surface waters exceeded their permit limits by more than 1,000 percent. In that same report, EPA reported that significant noncompliance by major polluters was on the rise, increasing by 8 percent between 1994 and 2001, to a grand total of one-quarter of all such sources engaged in blatant violations of the law.

Today you will hear a witness challenge the wisdom of one small subset of criminal enforcement under the Clean Water Act that is typically used to punish oil and gas companies that cause disastrous spills. The oil and gas industry has already urged you to consider amendments to undercut these provisions, adding insult to the gross injury already visited on EPA's enforcement program.

Not only do I disagree with the reasoning that underlies these complaints, I believe they can be best characterized as fiddling while Rome burns. They distract attention from the much more important point that EPA's entire enforcement program is on the ropes.

These complaints are based on a false premise. The most respectable argument for weakening the law in this area is the concern that the possibility of criminal enforcement has made witnesses reluctant to speak frankly with an Agency's investigators.

Much the same argument could be made in any area where criminal prosecutions are possible. Yet, it is difficult to imagine any

serious person arguing that we should repeal criminal laws because they make potential witnesses uncomfortable.

The cases pursued by the Department of Justice involved very careless, egregious conduct. The question before you is: Which is more effective, creating a strong incentive to prevent such spills, or gaining some undocumented additional cooperation after the fact?

The Nation faces many challenges at home and abroad. The economy is worsening and the funding for domestic programs continues to shrink. In this environment, deterrence-based enforcement is crucial because the only alternative is the far more expensive practice of cajoling law breakers back into compliance.

Thank you. I would ask that my complete testimony and the chart be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered. Thank you very much, Ms. Steinzor.

Before you begin, Mr. Hall, let me tell you that a vote is underway. However, our Chairman, Senator Inhofe, I understand is voting and coming this way so he can take the Chair when I go vote. Hopefully, we will be able to continue the hearing uninterrupted. If he does not arrive before I have to leave, then there will be a very short break. We encourage everyone to stay here and be ready.

Mr. Hall, please begin.

STATEMENT OF JIM HALL, PRINCIPAL PARTNER, HALL AND ASSOCIATES

Mr. HALL. Mr. Chairman, Senator Jeffords, thank you for the invitation to testify before you today on a matter I believe is important to transportation safety.

On my background, I was nominated as a member of the National Transportation Safety Board by President Bill Clinton in 1993, and served as the Board's Chairman from June 1994 to January 2001. I presently serve as the president of Hall and Associates where I advise a number of government and private clients on transportation safety and security issues. Although I do represent oil industry interests who have an interest in the provision I will discuss, my testimony is my own and reflects my experience on the Safety Board.

The Safety Board serves as the eyes and ears of the American people whenever there is a significant transportation incident. Its mission is to impartially and thoroughly investigate accidents to determine their cause, with the primary goal of preventing future accidents. NTSB investigations rely, in large part, on the voluntary and unpaid assistance of companies involved in accidents to understand what went wrong and how to fix it.

This system of voluntary cooperation works exceedingly well and has succeeded in its goal of a safer transportation system. However, the threat of criminal sanction for purely accidental behavior has the real potential to stifle this voluntary cooperation, to stifle the development of information necessary to understand an occurrence and to prevent its repetition.

Every mode of transportation is regulated for safety purposes under a variety of statutes. Each of these provides for both civil and criminal sanction for some classes of regulatory violation. Typi-

cally, criminal violations are reserved for knowing violations. Activities such as falsification of records or safety tests, the deliberate violation of regulatory standards, or willful or reckless behavior that leads to injury, death, or destruction of property.

However, one statute, the Clean Water Act, provides criminal penalties including fines and imprisonment for simple negligence. Simple negligence does not require criminal intent or knowledge, or even willful or reckless disregard of norms. Potentially, an entity believing that it is exercising due caution and using current technology and modern procedures may still find that the company, its operating employees, and its supervisors will be charged criminally if a water source becomes polluted. The implication for safety investigations, and ultimately safe regulation under the Clean Water Act are problematical, at best.

During my tenure at the NTSB, I became increasingly concerned with the trend toward the criminalization of any or all transportation accidents. Let me be clear. There are accidents where criminal prosecution is warranted, and even the preferred course of action. While traditional criminal law theory requires a finding that one intended the consequences of the criminal act, it has long been accepted—and I accept the proposition—that wanton disregard of behavioral norm suffices to sustain a criminal prosecution, even if the consequences of the behavior were not intended, indeed, even if they were as horrifying to the perpetrator as to the rest of us.

At a symposium on Transportation Safety and the Law that the NTSB convened under my direction in April 2000, several themes emerged that bear repeating. Transportation safety is increasingly dependent on being able to spot trends, to see problems as they arise, to anticipate failures from sophisticated data mining, and from the sometimes not so sophisticated self-disclosure of near misses.

That is exactly the issue with the Clean Water Act. Since simple negligence can be treated as a criminal act, punishable by imprisonment when an accident investigator arrives on the scene, prevention and understanding takes a back seat to legal maneuvering.

While criminal enforcement can be an important tool, it should be directed toward intention or reckless behavior rather than nonintentional conduct. Criminal penalties do deter intentional conduct, but have a much diminished or unproven relationship to preventing purely accidental behavior, and can deny safety regulators the very information they need to decide how to prevent similar accidents in the future. The intent should be to promote cooperation rather than to threaten parties with punishment for things over which they have no control.

In conclusion, it is my conviction that the balance between appropriately pursuing individual wrongdoers on the one hand and the broader purpose of accident investigation and prevention on the other, tips more and more aware from a focus on prevention. We follow that road at our long-term peril.

Thank you, Mr. Chairman. I would ask that my complete testimony be included in the record in its entirety.

Senator CRAPO. Without objection, so ordered.

Senator Inhofe [assuming the chair]. Thank you very much, Mr. Hall.

Let me apologize to the witnesses, and particularly to the previous panel. This happens to be a day that happens once a year that the Oklahoma State Chamber of Commerce comes to Washington. With them, come all the organizations—the farmers, the bankers, and the rest. That is why Mr. Kouplen is here. It also makes it for a very busy day. On top of that, we have Senate Armed Services hearings taking place right now.

I think it is important to talk a little bit how about the SPCC Plans are going to affect the agricultural community. Most of my colleagues will read any concerns about the rule that would be coming from industry or coming from the oil industry. It should be emphasized that this is also going to impact family farmers.

In your testimony, Steve, you provide some information about the use and storage of oil and fuel on farms. You also indicated that the EPA did not fully consider the impact of the rule, and what impact it would have on farms. What else should the EPA know about how farms use and store fuel and the efforts of this rule that you have?

I would ask you to answer that question by drawing upon your background. I think you represent some 140,000 farmers in our State of Oklahoma. Every time something like this comes up, they always talk about industry. They always talk about the energy industry, or about electricity generation. How does it affect you?

Mr. KOUPLEN. Well, to begin with Senator, let me say that we really did not realize we had a problem in the agricultural sector with this issue. We think that we do a good job of being very careful with how we handle fuel and oils on our properties. We have come to the table realizing that if this rule goes into effect, that the possible cost—and these are projections—could run as high as $25,000 to the individual farm family. If they have separate fuel locations in more than one place on their operation, it could go even higher than that.

We probably have come late to the game with this issue. But we really realize now that it could drastically affect the family farmer. With that low of a threshold of fuel, 1,320 gallons, that is not very much. It would affect a great number of our producers, not only in Oklahoma, but in this country.

Senator INHOFE. Would you give a similar response on TMDLs and how this could affect the land owners and land rights?

Mr. KOUPLEN. Well, there again, as agricultural producers, we try to be good stewards of the land and definitely not be polluters. We have done all we can through conservation practices to make sure we are not. Anytime you have any type of a regulatory program put on you, that puts a cost on your business. We do not have a way to push that cost through as farmers. We just absorb that. It does create a cost problem to producers, and especially to the family farmers who are in a very bad position right now as far as trying to stay in business in this country.

Senator INHOFE. I think a lot of people are not aware of the effect that a lot of these things have on the agricultural community. Certainly, we are an agricultural State in Oklahoma. I remember when we were debating the use of propane, as to should be treated as hazardous waste. I remember it so well. One of the persons is

in the audience right now that was there at that subcommittee hearing that I chaired back 5 or 6 years ago.

The response was, "Well, do not worry. It only costs about $600 or $700 a year to your average farmer." That was right after the Endangered Species suggestion on the Silver Shiner. It would also cost another $700. I think it is easy for people who are not out there and realizing how tough things are in what I call the real world. These things really do add up.

Mr. Lozeau, in this world that we are living in of limited resources, if we want States to put their money and staff toward waters that are impaired, why list waters which meet water quality standards and are clean, by your own testimony, just because they met standards by some means other than the BPT, or secondary treatment? Why waste resources that could be put toward waters that do not meet the standards?

Mr. LOZEAU. Because in addition to cleaning up the impaired waters, Mr. Chairman, it is important to protect the waters that are currently meeting the standards. Many of the waters in that category would be threatened. I think it would be very inefficient for a program like the TMDL program certainly not to apply to a water body that currently is still meeting standards, but degrading.

The proposal that EPA has put forward would eliminate consideration of the anti-degradation policies that the States have in place. It would eliminate those kinds of threatened waters from the list. Certainly, I would think those are high priority waters, in many ways for many States. Other waters that are less threatened could be lower priority, certainly, for the State. But I think Congress had in mind to have TMDLs in place to protect all waters, to make sure that the gains that are in place now have been achieved. It will stay that way for the coming decades, and not just for the moment.

Senator INHOFE. Were you here during my opening statement?

Mr. LOZEAU. Yes, I was.

Senator INHOFE. I commented on what difference does it make whether the EPA would issue a figure, a number, as opposed to issuing the way that they have reached that number. Maybe I am not wording that right. Do you have any thoughts you would like to share with us on that?

If you achieve it, what difference does it make if the EPA is supervising it or if it is done by the State and by the land owner himself in cooperation with each other?

Mr. LOZEAU. Well, we are talking about water quality standards that would apply throughout a watershed. If you create a loading capacity that is going to meet those standards, you would have to know where the loads are coming in and who is putting those loads in, where they hit that water body, and whether in that particular area you are going to have a violation of the standards.

The gross allocations would make believe that you only measure success at one point low in the watershed, for example, of some arbitrary downstream point. In order to know if a TMDL is going to work, you have to make sure it works throughout the watershed. You would have to know where it is coming in, where the allocations are occurring, and whether there is a smaller tributary that is more burden, perhaps, than the mainstem river downstream.

Senator INHOFE. Would any of the rest of you like to address that?

Ms. Steinzor.

Ms. STEINZOR. Mr. Chairman, I would like to address that. Mr. Mehan was telling the committee about his great confidence in trading as an alternative, a less expensive method for achieving greater water quality. If the only total burden that is calculated is done on a watershed-wide basis, as opposed to an individual facility basis, the trading program becomes virtually impossible.

I must admit to being very puzzled. It would seem as if EPA is on a course that is completely inconsistent. It would allocate one single total load for all sources in a watershed, at the same time that it is touting trading as the solution to many of our problems.

I surely agree with you that the best way to approach nonpoint sources is through a trading program. But we have to have one that is not based on paper trades or sham trades that do not achieve real reductions.

Senator INHOFE. Does anyone else have any thoughts on that? All right.

I would only comment that as a general rule they think that a federally regulated mandate is better just by virtually the fact that it done from the Federal Government. There is a basic difference of opinion on that.

Mr. Hall, did anyone talk about the liability, the criminal punishments? Did you visit about that during your opening statement?

Mr. HALL. I addressed that in my opening statement, sir. I think Ms. Steinzor alluded to it. That was the only other conversation.

Senator INHOFE. Well, I would like to ask each one of you. Do you believe that Congress, when it enacted the Clean Water Act, the criminal negligence provisions intended, to cause citizens to refuse to cooperate with the NTSB and other accident investigators due to potential criminal liability? In other words, I am getting around the unintended, accidental, consequences.

Would anyone like to address this?

Mr. Hall?

Mr. HALL. Mr. Chairman, my feeling, of course, and the purpose for my being here today, is that I do not believe that Congress intended at the time that this Act was passed, to set up a situation where individuals who did not knowingly or willingly commit an act, and truly accidental behavior, would face criminal penalties for an act that obviously impacted transportation safety, and in this case, of course, water quality.

That is why I am here today to ask the committee, in its judgment, to relook again at this policy. I think it is not an effective policy for achieving the goal of transportation safety. I do not think the Justice Department should be put in the position of substituting for what should be a regulatory framework to protect the environment.

Senator INHOFE. I was in the House at the time that the Act passed. I remember the discussion on this. I guess what you are saying is that there are cases that you know of, and all of us in this room know of, where something was done. But it was done accidentally, where they actually went through the process, and maybe even served time.

Would either of you, on the other side of this issue, like to comment on this? Do you think that if something is done, it is done not with intent, and just through negligence, that there should be that type of punishment?

Ms. Steinzor.

Ms. STEINZOR. Mr. Chairman, I believe that I am the one that is supposed to take this issue. I think that the question really does not make much sense outside the context of the specific facts of the cases that have brought.

Let me just describe the facts of supervision of pipeline maintenance of them, the Hanousack case. This was a gentleman who took over from another person. Mr. Hunz was the first man and Mr. Hanousack was the second. He was a road master, out of sight, where there was a lot of blasting going on right near an oil pipeline.

Mr. Hunz had established procedures for protecting the pipeline, making it very clear where the pipeline was located, building protective covering over it, and fencing it off, so that there would be no accident, that these boulders that were being blown up by dynamite would not fall on the pipeline and crack it.

When Mr. Hanousack came on the job, he abandoned all of that precaution and removed the barricades, removed the protective covering, and proceeded to allow his crew to push these big rocks around until one day when Mr. Hanasack was not on the site, somebody dropped a big boulder on the pipeline and there was a huge spill.

This is not an innocent accident. This is a person who was acting in reckless disregard of the basic safety needs that happen when you work near a pipeline. He cost not just the environment, but the pipeline company, lots of money and caused tremendous trouble.

I guess the question would be—and, of course, you would know this much better than I because you were in the Congress at the time—did you intend to make people who are so reckless and so careless, did you intend to give them the comfort that no matter what they did, they would escape prosecution?

Senator INHOFE. Well, I would only respond that you have cited one case, Ms. Steinzor, where perhaps it was reckless. I am not talking about those cases. I am talking about when an accident occurs.

Does anyone have any kind of anecdotal thing they would like to put as an example of something that was purely accidental that ended up with the type of punishment that I outlined?

OK. All right. I think that we are in the process of votes right now. Unfortunately, that does happen sometimes. I appreciate very much your coming to testify. Your entire statements will be considered by this committee as we are making these formulations. Your interests will be attended to.

Let us do this. Let us go ahead and recess, subject to the call of the Chair. If no one gets back in about 10 minutes, then we will go ahead and adjourn this meeting.

[Recess.]

Senator INHOFE. I would ask the meeting to come back to order.

Senator Jeffords has returned and has some questions for our witnesses.

Senator Jeffords, you are recognized to question the witnesses.

Senator JEFFORDS. Mr. Lozeau, as someone who has worked on TMDLs, what do you think will be the real world effect of the proposed new TMDL rule on water quality if it were enacted?

Mr. LOZEAU. Well, in the version of the draft that we have seen were enacted, I think the rule would not guarantee or assure that any water that is currently on any of the TMDL lists, would ever comply with standards. I think it would create a program that would cede so much control to individual discharges ultimately, and that it would have no real provisions for the EPA to guarantee that pollution coming into a water body would be controlled at its source, and that it is going to lead to widespread water quality degradation.

I do think that many threatened waters which we would hope would be protected before they become impaired, will fall by the wayside, and that we are going to see the lists of impaired waters growing in the same rate they are currently growing. We are going to see no effect of the program to prevent those additional pollutants and the additional costs that come from that by waiting to clean up these waters.

Senator JEFFORDS. Instead of the rewrite of the TMDL rule, what would you propose that EPA and the Bush administration do to clean up the Nation's waters?

Mr. LOZEAU. Well, I think they should certainly vigorously implement the existing rules and continue to provide them an opportunity to work. I think over time, certainly, those rules can be improved, and can bring more waters into the program and realize the benefits of the program. I think that would be the obvious first step, albeit hopefully the program, over time, will continue to improve.

That would be my suggestion. Obviously, funding is important to assist the States and other stakeholders in making sure that the TMDLs that ultimately are being developed actually work. Certainly, I would hope that the quality of TMDLs will continue to improve over time. Certainly, there are some TMDLs out there, I suspect, are not very effective. Over time, I would hope that the frame work that is in place would continue to improve those and that we would realize the benefits that Congress hoped for back in 1972.

Senator JEFFORDS. Thank you.

Mr. Hall, in your testimony, you state that if the NTSB can do a thorough investigation, completed, and have cooperation, larger problems can be corrected before they cause future accidents or incidents.

One of the accident investigations you completed while you were at the NTSB is the Olympic Pipeline case in which three youths were killed in Bellingham, WA. In December 1999, as Chairman of the NTSB, when speaking of the Olympic Pipeline explosion and oil spill, you said, "We will not be surprised to find that some of the factors in this accident reflect lessons that have gone unlearned."

The NTSB had for years recommended improvements, such as a rapid shutdown of ruptured pipelines, periodic inspection and testing of old pipelines, and improved employee training. You went on to say, "Pipeline industry reaction to these recommendations has been tepid, if not hostile."

In December 2002, Olympic and Shell agreed to pay $112 million to settle criminal charges. Much of that money will be spent on pipeline safety improvements. Today, less than a year after paying this seemingly large sum of money, Olympic is embroiled in a dispute with the city of Seattle over the company's efforts to avoid conducting a high-pressure water test for the portion of the pipeline running through Seattle and close to two elementary schools.

It seems that testing a pipeline for weakness in a highly populated area could be one of the solutions you mentioned in your testimony that could avoid a future accident. Much of your argument seems to depend on the assumption that given no potential for the criminal enforcement under the Clean Water Act, companies will voluntarily cooperate with the NTSB and voluntarily improve their safety records.

Your comments in 1999 suggest that you have very little confidence that the industry will voluntarily make any safety improvements, even in the urging of the NTSB. It seems that the Olympic case would disprove the theory that you have presented to the committee today.

Can you explain this kind of contradiction?

Mr. HALL. Yes, sir, Senator. Let me first make just one clarification. I was Chairman during the majority of that investigation. However, that investigation was completed and the final report was issued after I had left the National Transportation Safety Board.

My interest in this issue goes from observations I had over 7 years as Chairman of the National Transportation Safety Board in trying to obviously advance safe transportation policies in the United States.

Where I saw failures, either by the industry or by the Government, to put in place safe regulatory frameworks for which the safe operation of transportation systems could then be completed, I was very vocal and spoke out. I felt very strongly about the statements you read. I felt very strongly about that. It correctly reflects my feelings at that time.

As a result of that tragedy—and I think the Board's investigation—we have seen Congress now move to put in place a regulatory framework for pipeline safety that requires training, that requires periodic testing, and that requires education, a number of the things that were not in place in the safety system at that time.

I have observed, and we have in our country and should be proud of t, the safest aviation transportation system in the world. That has been built, I believe, out of the voluntary compliance that we have seen in the aviation community with NTSB investigations. Programs like FOQWA and the Aviation Safety Reporting System Program run by NASA, have put us in a situation where I believe now we are almost close to 2 years without a major aviation transportation accident in our country.

I am speaking today on the basis of policy. I believe in a policy that includes obviously industry compliance, voluntary reporting systems, and a sound regulatory framework in this situation obviously at the State and Federal level. I think there is certainly an appropriate place for criminal penalties, but it is my belief—based on my own experience—that the present trend toward the criminal-

ization in the Clean Water Act for a criminal penalty, without knowing or willing conduct, will have a chilling effect on the Board's investigations, and will not achieve what Ms. Steinzor and others in the environmental community might want by substituting the Justice Department as the regulatory authority in terms of pipeline or clean water safety.

Senator JEFFORDS. Thank you.

Thank you, Mr. Chairman.

Senator Crapo [resuming the chair]. Thank you very much, Senator Jeffords.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

Mr. Fuller, I have two very short questions.

First of all, welcome back. I always enjoy your testimony, although I was not here to hear your opening statement. You were minority staff under Lloyd Bentsen back during the formulation of all this.

Under 407(l) dealing with uncontaminated water in terms of storm water runoff, would you characterize what you felt at that time was the intent of the legislation as it was formulated?

Mr. FULLER. That issue is one that arose in the context of dealing with storm water generally. My recollection of it was that because we were dealing with essentially water flows over ground, that the effort was designed to try to say we did not want to add another permitting burden to the process of developing and producing oil and natural gas without there being some contamination that needed to be addressed.

There had been issues that had been raised about the application of the NPDES program broadly to that activity. Our intent was, as we were working on it, to try to come up with a cut-point that basically said, "Well, if it is contaminated, then——"

Senator INHOFE. The test was whether or not it was contaminated?

Mr. FULLER. Yes, sir; it would be captured under the NPDES permit under that section. If it was not, then it would not require a permit.

Senator INHOFE. I notice in my notes here that Mr. Lozeau's testimony accuses the oil industry of being in back room negotiations with the EPA on the SPCC rules and definition of waters of the United States. Mr. Fuller, would you are to characterize those negotiations?

Mr. FULLER. Well, I think the reference in the testimony has to do with litigation that was filed by some parts of the oil industry with respect to the SPCC Plan requirement, the new rules and regulations. IPAA was not a part of that litigation so I do not know any of the details there.

What I can say is that one of the issues in developing a SPCC Plan is whether it has an effect on navigable waters. There are two tests. You have to be a facility and you have to have an effect on navigable waters. That is what triggers the need to do a plan.

When these regulations were put together—they were actually put together over a decade or more—and became finalized, during that same period of time the issue of the so-called SWANCC deci-

sion arose which called into question exactly what the scope of navigable waters are.

Another process is underway to try to address that question, to try to come up with a clear definition and a consistent one of what constitutes navigable waters. If you are a producer, and particularly a small producer like my members are, you now are looking at this requirement that says that you have to have a new Plan requirement. If it goes forward under the structure that it is currently written, you have an effect on navigable waters.

But what constitutes a navigable water while this other issue remains is unsettled. From our perspective, we believe that the first issue needs to be settled in some clear fashion before we try to then broadly apply new plan requirements based on an uninformed sense of what navigable waters are.

The reason why that becomes important to somebody like my members is that these plans are costly. They can cost $20,000. Just to give you an idea, a marginal well has a break-even point of about $19.50 a barrel. So, where prices are now, that means that the average well makes about $20 a day. If it costs $20,000 to do an SPCC Plan, that is 1,000 days worth of profit from that well.

I do not believe that our members want to spend that kind of money for something that turns out to be unneeded because the definition is different. So it is the definition of navigable waters that is driving what happens with SPCC, and not the other way around.

Senator INHOFE. I appreciate that very much.

I have one last thing, Mr. Chairman. In my State of Oklahoma, approximately .00126 of the oil produced in Oklahoma was spilled in 2002. That statistic, I think, is supposed to be pretty accurate. That is not a very high spill rate.

I would just like to ask you, Mr. Fuller, in your opinion, is there a problem with oil spills that was not being met with the existing rule because no great improvements were made during that time?

Mr. FULLER. Those are all based on procedures that had been in place for decades. The SPCC requirement has been around since shortly after the Clean Water Act was passed in 1972. Plans had been in place. These new requirements are all changes to those plans.

What that spill data says, and what we have been trying to say for a long time, is that the existing program has worked. Apart from that, whether there are Plans or not, we still have a responsibility to respond to oil spills if they occur.

What we are dealing with here is really a planning requirement, not a response requirement. I think the record in Oklahoma and other States demonstrates that the existing planning requirements have been successful. We have not seen the type of need to make these changes that we would expect if they were a logical change.

Senator INHOFE. That is a very good answer. Thank you very much, Mr. Fuller.

Thank you, Mr. Chairman.

Senator CRAPO. Thank you very much.

In the interest of time, I am going to forego my questions.

Does anybody have any further questions?

Senator JEFFORDS. I do.

Senator CRAPO. Senator Jeffords.

Senator JEFFORDS. Mr. Hall, and Ms. Steinzor, your testimony implies that the Clean Water Act precludes the use of the same tools used by other Agencies to elicit testimony from people who may be criminally liable in an event.

Is the Government somehow precluded from offering immunity under the criminal negligence section of the Clean Water Act?

Mr. Hall.

Mr. HALL. In terms of the NTSB, the NTSB does not have the authority to grant immunity in our investigations. We rely on voluntary compliance. Again, I believe that criminal penalties, where again it is for simple negligence, and not a knowing or willing act, such as in the Clean Water Act, does not work as an effective deterrent in terms of preventing future events.

The success, Senator,—and I know you are familiar with a great deal of this as well—in accident investigation, and particularly where we are entering this age of technology, is to understand obviously the various change in the accident sequence, whether it be technology or whether it be human factors so that we can put in place effective deterrents to better protect our society.

For example, we had a recent accident in California with a very elderly driver who probably, with an unintentional act. A number of individuals were killed in an open air market where they had been no barriers and no protections put in place for separation between the motorists and the pedestrians.

To criminalize these types of investigations as far as the NTSB is concerned, I believe is going to end up in a situation where we are going to be unable to learn from accidents, and therefore, create statutory responses and appropriate standards and policies within the industry.

Let me say very clearly that where there are intentional acts, intentional wrongdoing, I would be the very first to say that the use of criminal penalties are necessary and appropriate. I respectfully believe that this is having unintended consequences. My purpose of being here today is to ask the wisdom of this committee and this Congress and look at that to see if they agree.

Certainly, on any issue of this nature, there are two sides of any discussion. I am here today to speak to you based on my experience at the National Transportation Safety Board over 7 years in trying to work in this area to advance transportation safety.

Senator JEFFORDS. Ms. Steinzor.

Ms. STEINZOR. Senator Jeffords, I appreciate an opportunity to respond. While you were voting we had a conversation about specific cases that have been brought under 309. Mr. Hall says he is closely reading this statute.

It is worth noting that there is not a single case that he can raise that has actually been brought under this provision where an innocent person who had a simple accident was prosecuted. I think that is very telling.

The cases that have come up that we have discussed involve very willful carelessness, and in fact, have involved deaths and great tragedies for the environment. For example, the *Exxon Valdez* case was premised on negligence because great damage was caused to

the environment and there was a belief that the company had been very careless in screening its employees in that case.

As for voluntary compliance, I am confused here. When Mr. Hall was with the NTSB, as your question to him before suggested, he was decrying the lack of cooperation by the oil industry with these investigations. It is also true that you in your wisdom enacted very strong legislation regulating pipeline safety. I do not think there is anyone here who would say that all we need to do is leave folks alone and they will voluntarily choose to do the right thing. That was not the reaction to the Olympic incident which caused very serious damage.

Finally, the Justice Department has complete authority to grant immunity to witnesses that it feels it needs to pursue an investigation, or if its sister Agency, the NTSB needs to have a witness granted immunity, this is one Government. People talk with each other. Immunity is always an option. There are also ample policies that encourage people to come forward voluntarily. If they cooperate, they are given special consideration in the way that they are punished, civilly or criminally.

After listening today, I think I understand the arguments here less well than I did when I read a lot of materials about them. I am quite perplexed.

Senator JEFFORDS. Mr. Hall.

Mr. HALL. Senator, Ms. Steinzor may be confused. I am not. Let me say that I believe she misspoke. I did not say that the industry did not cooperate with the investigations of the NTSB. What I stated was that there had been a failure to act by both the Congress and the industry on some 14 years of recommendations the Board had made for simple basic things such as regulatory requirements for training and testing that needed to be put in place.

Regretfully, because of that horrible tragedy at Olympic, we do have a new Pipeline Safety Act. Congress has addressed, and the industry has, I believe, put in place, a number of the Board's recommendations.

I am speaking here, Senator, on the basis of what I believe is good policy. That is my purpose. I have spoken on this issue. I held a symposium while I was Chairman of the NTSB on this issue. This is not an issue that I have not raised as much concern about as I did at the time I spoke very forthrightly. I thought about the industry and the Government's responsibility and actions in the pipeline area.

I have also spoken out on my concern about the criminalization and having the Justice Department become the regulatory in this Nation for transportation safety, and putting citizens that are not in a willing or knowing act, at peril for the whim of a criminal prosecution by whoever a local prosecutor might be.

Senator JEFFORDS. Thank you.

Thank you, Mr. Chairman.

Senator CRAPO. Thank you very much, Senator Jeffords.

Our time for the hearing is rapidly expiring but I did want to ask one followup question on this interchange right here. This will be both to Ms. Steinzor and to Mr. Hall.

Ms. Steinzor, if I understand your testimony correctly, you have pointed out that there are no prosecutions of a purely negligent

conduct under this statute. If I understand Mr. Hall's testimony correctly, he is saying that the threat of such a prosecution is having a chilling effect on people bringing forward information.

I would like both of you to just discuss that for a moment. Is there, in fact, a chilling effect taking place here on the ability of the Government to get adequate information and to get the kind of compliance that is necessary?

Ms. STEINZOR. I believe that what I said was that there is no case that Mr. Hall is willing to describe to you that has happened in the real world where people are totally innocent, who never did anything wrong, were prosecuted criminally. I do not know how you measure whether it is having a chilling effect. I do know that when I look at the prosecutions of the people that were involved in these cases, I do not care if it chilled them from cooperating because they were punished for very bad acts.

What Mr. Hall seems to be asking you to do is to remove any penalty for behavior that is grossly careless. That is what the cases show.

I think you would be more comfortable considering an amendment of the law if there was one case that had been brought forward here where when you looked into the facts. All of these convictions have been upheld through the Court of Appeals. The Supreme Court has resisted reviewing them for whatever reason. These cases have been litigated very heavily. As the facts were developed, not one single case of all of these is worth describing to you as an example of some innocent sympathetic person who just wandered into accident. I would suggest that is telling.

Senator CRAPO. Mr. Hall.

Mr. HALL. Well, Mr. Chairman, let me say that I came here today to discuss the policy. That was my concern. I think that is reflected in both my oral and written testimony to the Board. It has been my personal experience that it is having a chilling effect on the NTSB investigations. That is why I convened the symposium on this subject. That is why I have chosen to come here today to make this testimony to all of you.

I worked on Senator Muskie's staff at the time the Clean Air Act and the Clean Water Act were being written. I worked for 7 years in the State of Tennessee in Governor McWhorter's office trying to work on environmental issues and concerns. I worked 7 years at the Board.

I also believe, however, in the fundamental fairness of our Government and our country as it pertains to the treatment of individuals. Since Ms. Steinzor is relying on a case, I will just close by quoting a citation from the Supreme Court in which the Court said, "in 1952 that the contention that an injury can amount to a crime only when inflicted by intention, is as universal and persistent in mature systems as law, as belief in freedom of the human will and a consequent ability of the normal individual to choose between good and evil."

Where someone knowingly and willingly performs an act, I do think there is an appropriate place for criminal law. I do think that this provision can have a chilling effect. I think that the nose under the camel's tent of having the Justice Department become the regu-

lator for transportation safety in our country, is bad public policy. That is my personal opinion.

I appreciate very much the Senator's patience and time in listening to my opinions.

Senator CRAPO. Thank you very much.

We thank everyone on the panel.

Senator JEFFORDS. Mr. Chairman, I would like to have just one further question.

Senator CRAPO. Senator Jeffords?

Senator JEFFORDS. Mr. Lozeau, what will be the impact on clean water protections if the oil industry lawsuit on SPCC Plans results in a settlement agreement that modifies the definition of the waters of the United States?

Mr. LOZEAU. Obviously, Senator, first of all, we are worried that the 10-year policy we heard about is now being replaced with a back room discussion which the environmental organizations are not invited to. Out of that will come some indication by EPA that industries exaggerated interpretation of the Supreme Court's discussion of the waters of the United States issue in the solid waste case has some merit of some kind.

We would be worried that the EPA would make a decision in that back room that would withdraw a definition of waters which has been in place in other parts of the regulations for the past 30 years.

There is no issue as to the definition of navigable waters. What we have is industry exaggerating the import of the Supreme Court's decision, trying to expand it beyond the terms that the Court laid down on paper, and now using that argument to set up these discussions out of earshot and short circuit what was a long and thoughtful process, to come up with that regulation in the first place.

That is what we are worried about.

Senator JEFFORDS. Thank you.

Thank you, Mr. Chairman.

Senator CRAPO. Thank you very much.

Again, we want to thank all the panelists for the time and effort you have put in, not just to come here and testify in person, but also in preparing your written testimony. Even before the hearing began with the benefit of all the written testimony, we have had a significant amount of activity and evaluation going on with regard to the suggestions of the members of these three panels.

We are very concerned about the Clean Water Act and the proper implementation of the Act. We want to get to the right public policy as we move forward. Your testimony here today has helped us. We again thank everybody for their participation.

With that, this hearing is adjourned.

[Whereupon, at 12:05 p.m., the subcommittee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow:]

STATEMENT OF HON. LINCOLN CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Thank you Chairman Crapo and Senator Graham for holding this important oversight hearing on implementation of the Clean Water Act. I appreciate the opportunity to raise an issue of great concern for my state and region—the availability

of Clean Water Act Section 319 funding for development and implementation of the Phase II Storm Water Program.

Yesterday, I visited the site of a devastating fish kill in Rhode Island, caused by the absence of dissolved oxygen—an anoxic event—in an area known as Greenwich Bay. As the former Mayor of the city of Warwick, which encompasses Greenwich Bay, I had undertaken a massive bond issue several years ago to provide funding for improving septic systems and restoring the water quality of this area. Visiting the fish kill site yesterday, I was disheartened to learn how much more needed to be done. In combination with other factors—including the ongoing deficiencies of private septic systems—stormwater has been found to be a significant contributor to the nutrient loads entering Greenwich Bay and disrupting its natural balance.

In Rhode Island, as well as many other highly urbanized areas, stormwater ranks high on the list of top-priority pollution sources impacting the water quality of our lakes, rivers, streams, and bays. As states proceed with development of the federally mandated Phase II Storm Water Program, the costs of implementing the requirements of the program are becoming a major concern for states and municipalities.

At issue is whether funds provided to states through Section 319 of the Clean Water Act may be used for the purposes of developing and implementing the Phase II Storm Water Rule that went into effect in March 2003. Last year, this Committee approved an amendment, signed into law as part of the Great Lakes and Lake Champlain Act of 2002, that provided a 1-year fix, during fiscal year 2003, for states to retain maximum flexibility in utlizing 319 funding for addressing their stormwater concerns.

In recent years, the EPA Nonpoint Source Program has increasingly focused on impaired waters and stormwater-related impairments. Although the Clean Water Act appears silent on the eligibility of Section 319 funding to address storm water or NPDES-related issues, EPA has thus far interpreted the Act to prohibit 319 funds from being used for implementation of the Phase II Storm Water Program. In recent months, a lack of clarity also exists on the use of Section 319 funding in geographic areas covered by the Phase II Program. Phase II applies to all populated areas of 1000 people or greater per square mile. In Rhode Island, nearly all of the state's impaired waters are included in Phase II areas. Given a strict EPA interpretation of the law, Section 319 funds could not be used in any of these areas.

In the weeks ahead, I will be exploring the idea of introducing a bill to provide permanent authority for states to utilize Section 319 moneys for development and implementation of the Phase II Storm Water Program. I look forward to working with my committee colleagues and EPA on this legislation.

STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

Clean water. Mankind, and virtually every other living thing on this planet, needs clean water to survive. And yet, after 30 years of progress, our clean water programs are under assault once again. Under this administration, pollution restrictions are being rolled-back, enforcement of the remaining regulations is being curtailed, and much of the fresh water in the arid west is being handed over to a small circle of industrial interests. All of this will harm the average American.

There is no question that clean water is one of our most important resources. For human beings, water is actually more important than food. A person will die from dehydration more quickly than from starvation. The harmful effects of sewage in drinking water has been known for many years. And even though they are less obvious in the short-term, the harmful effects of industrial and chemical pollutants were well known long before Congress passed the Clean Water Act in 1972.

But we humans have a long history of misusing our water resources. Historically, we have used our rivers, our streams and even the oceans as a free disposal system for every imaginable type of waste. Abuse of our waters reached new heights during the industrial revolution. The industrial revolution was one of the principal factors that made our modern civilization possible, but it was also a chief source of new pollution problems. It led to population growth and concentration, it exacerbated existing pollution problems, and it created new types of pollution, such as massively concentrated natural pollutants and a host of artificial pollutants, all on a scale never before imaginable. In retrospect, we now know that our industrial prowess developed much more quickly than our environmental awareness.

Once upon a time we believed that swamps and wetlands were the sources of disease, and that it was a lofty goal to drain them or fill them. Now we now that these lands are incubators for many marine species that are critical elements of the food

chain, and that they act as filters to remove countless tons of pollutants from the land and water every year.

Once upon a time, large pipes discharging tons of untreated waste into the rivers were a sign of economic strength. Now we realize that it is unacceptable for a river to be so polluted it can catch fire.

Once upon a time we thought the oceans were the ultimate disposal system—that they were so large that they could absorb any amount of waste we dumped into them. Now we know that even the oceans have their limits. We have seen the beach closings. We have seen whales that died after eating plastic bags or balloons. We have seen fish, birds and other animals that died after getting entangled in carriers from six-packs of drinks and other trash. And we know now that many of the fish in the oceans are contaminated by mercury and other chemicals that we have produced.

Once upon a time we thought that only large "navigable" waters were worth protecting. Now we know that dumping pollution in small streams and ponds is often more harmful. There is less water to dilute the pollution, the types of fish and animals in those waters are often less tolerant of pollution, and eventually it will find its way into the navigable waters.

The modern era of water protection was born in the 1940's and 50's when the Federal Government began providing financial assistance for local jurisdictions to construct sewage treatment plants. The current basis for most of our water pollution control efforts is the Clean Water Act of 1972, which had a stated goal of making most waters "fishable and swimmable" by 1983, and to eliminate the discharge of pollutants to "navigable" waters by 1985.

We have fallen short of those lofty goals. There has been progress, but not enough. According to EPA, the percentage of our nation's waters that meet water quality standards has increased by one-third to two-thirds since the Clean Water Act went into effect. But EPA also says approximately forty percent of our stream miles and forty-five percent our lake acres are still impaired, and forty-four states have some sort of fish-consumption advisory in effect.

After 30 years of work, and billions of dollars, why haven't we been more successful? There are many factors, but I believe a major factor is that Congress has been inconsistent in its demand for water quality improvement. Rather than demanding that EPA enforce the Clean Water Act, Congress has more often undercut it. Authorizations for several provisions, including assistance to states, research, and general EPA support, were allowed to expire in 1987. Authorization of wastewater treatment funding, the program that started it all, expired in 1994. The fact that Congress allowed these authorizations to expire, but continues to appropriate funds for them, suggests that Congress would like to abandon these critically important programs but is afraid of the public's reaction. So it is not surprising that EPA and the states have been hesitant to enforce the Clean Water Act consistently. That is why some states refused to make water quality determinations until the courts told them to. That is why some states fall behind on their discharge permit reviews and do not always enforce even the outdated permits that they have issued.

And all of this is why our citizens are compelled to use their time an money to sue the states and the Federal Government demanding implementation of the laws Congress enacted. And what is the government response? Too often, government sides with the polluters, against the citizens. Although the Clean Water Act explicitly provides for citizen suits, all too often government's first action is to ask the court to deny citizens the standing to sue. The result is that with each case it becomes harder for citizens, the very people the laws should protect, to play a role in ensuring that Federal and state governments to do what was promised with such fanfare when the laws were passed.

Its time for Congress to step up to the plate. This Congress should:

- Recognize that every citizen of this country has a right to clean water;
- Recognize that the hidden costs of water pollution far exceed the cost of prevention;
- Ensure that wastewater funding programs are strengthened and made permanent;
- Set a new schedule to eliminate the discharge of pollutants into waterways from point sources;
- End the debate about "navigable" waters by expressing the Congress' intent to prohibit the discharge pollutants into any waters or water courses, including aquifers;
- Set procedures for periodically updating the list of regulated pollutants to keep pace with new scientific findings;
- Take steps to protect groundwater recharge areas; and
- Get serious about addressing nonpoint water pollution.

Once upon a time, United States common law held that it was a nuisance or tort for one person to emit pollution that harmed another. That long-standing legal precept was another casualty of the industrial revolution because judges were looking for ways to allow economic expansion. We suffer from that legacy today. Rather that saying our citizen's have the right to be free from pollution caused by others, our environmental regulations operate more like it is the businesses that have a right to pollute.

It is time to reassess our national policy on water pollution. We need to decide which "right" is more important. Who's rights should we be protecting, citizens that want to have safe water to drink and swim in, or industries that want permission to continue polluting the environment?

I do not profess to know the best way to resolve these issues. But I do know that limiting the "intensity" of emissions will result in more pollution, not less. We cannot continue down that path if we want our children to be able to swim in the local pond or eat the fish they catch. We need to cap, and then reduce, the total aggregate amount of pollution from all sources.

We made significant progress during the past 30 years, and we grew the economy at the same time. I believe we can continue doing both. I ask the members of this committee, and the entire Congress to join me in embracing these goals.

STATEMENT OF G. TRACY MEHAN III, ASSISTANT ADMINISTRATOR FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY

Good morning, Mr. Chairman and Members of the Subcommittee. I am Tracy Mehan, Assistant Administrator for Water at the U.S. Environmental Protection Agency (EPA). I appreciate this opportunity to discuss today's water quality challenges, and the Bush Administration's vision for protecting and restoring our Nation's watersheds.

INTRODUCTION

Last year, in a hearing on the 30th anniversary of the Clean Water Act (CWA), I testified before the full Committee regarding the tremendous progress that our Nation has made over the past three decades in addressing water pollution problems. Thanks to the investment of many local, Tribal, State, Federal, public and private partners we have successfully controlled the most egregious sources of pollution from municipal sewage treatment plants and industry. Many communities now enjoy the environmental and economic benefits of cleaner water, such as thriving lakefront communities in Cleveland and Chicago, restored fisheries in Lake Erie and the Potomac River, and increased revenues from real estate investment, recreation and tourism in many coastal communities such as Boston.

Despite those success stories, we recognize that many challenges remain. There are signs that some of our waters are in distress. States are reporting increases in beach closures and fish consumption advisories, and a large zone of low dissolved oxygen in the Gulf of Mexico.

Our water programs are at a historic turning point. Today I first want to share with you our vision for the future and to discuss some of our top priorities: our efforts to reorient our programs toward a watershed approach; establishment of a national-scale water quality monitoring and assessment program; better implementation of the Total Maximum Daily Load (TMDL) program; and, greater reliance on innovative tools such as trading and watershed-based permitting. All of these activities are critical in addressing today's water quality challenges more effectively and efficiently. Finally, I will address our efforts to control stormwater runoff.

THE WATERSHED APPROACH

Now that we have largely addressed problems from discrete point sources of pollution, we need to turn our attention to threats that are much more difficult to control, such as: nutrient over-enrichment, urban runnoff, groundwater/surface water interactions, invasive species, microbes in drinking water, and atmospheric deposition. These complex problems demand a more comprehensive or watershed-based approach that focuses less on the "end of pipe" and instead targets pollutants coming from the land—nonpoint source pollution or diffuse runoff. This approach to environmental management brings together public and private sector efforts to address the highest priority problems, looking at all sources of pollution within hydrologically defined geographic areas. The approach is grounded in sound science, characterized by robust stakeholder involvement, and focused on environmental results.

Because most water quality problems are best solved at the watershed level rather than at the individual waterbody or discharger level, we need to examine how we can best integrate the efforts of local watershed groups. Over the past decade and a half, we have seen the rise of literally thousands of citizen-based watershed organizations working to protect and restore their lakes, rivers, wetlands, and estuaries.

To provide support for these locally driven watershed protection efforts, in May EPA announced nearly $15 million in grants to 20 watershed organizations selected as part of President Bush's new Watershed Initiative. The grants will support community-driven initiatives to improve water quality and enhance outdoor recreation. EPA intends to announce a solicitation for new Watershed Initiative nominations for fiscal year 2004. We are confident that these projects will result in cleaner water for these communities and will serve as models for other communities. We are grateful for Congress' enthusiasm for this Initiative and ask support for the President's request of $21 million for the Initiative for next fiscal year.

MONITORING AND ASSESSMENT PROGRAMS

As we transition from a technology-based approach to a water-quality based-approach, and begin to reorient our programs on a watershed basis, it is imperative that we strengthen our water quality monitoring and assessment programs. In the 1970's, monitoring was primarily carried out at or near the end of the pipe, to measure how effectively individual permits were working. Today, however, we must be able to assess the inputs of millions of diffuse sources of pollution, such as sediments from construction sites, fertilizers from agricultural lands, and even pollutants coming from the air. And, to enable the use of more innovative tools and flexible approaches, such as trading between pollution sources, we need better baseline monitoring data to help us keep score.

How clean is the water? We currently have enough information to allow us to know what the conditions are in some site-specific areas, but as stated in EPA's Draft Report on the Environment 2003, "At this time, there is not sufficient information to provide a national answer to this question with confidence and scientific credibility."

Working with State, Federal, tribal, and local agencies, with the private sector, with universities and with the public, we must be able to provide answers to some very fundamental questions such as: How clean is the water? Is it getting any better? Are our management actions working? Without answers to these questions, we are challenged when it comes to making decisions about how best to address water quality problems and allocate our limited resources for cleanup, pollution prevention, and restoration.

Currently, most States monitor only a portion of their waters. While some States are using new approaches like statistically based surveys to characterize the overall condition of waters from a representative sample, many are still in the beginning stages of using these tools. And, because State standards and assessment methods vary across State lines, we find we cannot add up the data. In varying degrees, States are working to improve their monitoring systems, and EPA is working with them to help them identify and implement the key tenets of good monitoring programs.

Many Federal Agencies have, over the years, conducted a range of monitoring programs that have yielded valuable water quality data. However, none of them were designed to characterize the overall national condition of the waters of the U.S. in a comprehensive, statistically valid fashion. Because of the lack of comprehensive, national-level data, we cannot yet systematically document whether or not our pollution programs are effectively improving water quality on a national scale.

Besides EPA's recent Draft Report on the Environment 2003, the Heinz Center Report on the State of the Nation's Ecosystems, and various reports from the General Accounting Office, the National Academy of Public Administration and others show that there are major gaps in aggregate nationwide data on water quality and overall ecosystem health. These reports call for a national investment to build a cost-effective, scientifically sound foundation for our water quality management decisions.

We need, therefore, to take four critically important steps to achieve our goal of better monitoring for better management. First, we need to work with States to improve and strengthen State monitoring programs so that they can generate credible, comparable, comprehensive information. EPA is currently working with the States to ensure that they all achieve, for the first time, a set of basic monitoring elements including a common set of core water quality indicators that can be compared over time and across State boundaries. In March 2003, EPA provided States guidance on

such elements for a State monitoring and assessment program. Second, we must promote the use of multiple monitoring tools such as statistically based surveys, predictive monitoring, and remote sensing to support the full range of water quality decisions. Statistically based surveys, such as EPA's Environmental Monitoring and Assessment Program for example, provide a scientifically rigorous way to sample a subset of waters and then provide an estimate of the quality of all waters, along with a statement about the uncertainty surrounding that estimate. Third, we must manage our electronic data systems to share and improve compatibility of monitoring information and make data more accessible to the public. And fourth, perhaps most importantly, we must build stronger partnerships at the Federal, State, Tribal, and local levels to facilitate the sharing of comparable data and the use of multiple monitoring tools.

We need to continue working with States, Tribes, and our Federal partners to identify what investments are needed for long-term improvements in water quality monitoring. We need to look for efficiencies through new monitoring approaches, such as statistically based surveys or the use of models, through better collaboration, and through data sharing. And, we need to secure commitment from all stakeholders to better monitoring for better management of our water resources. We will be able to target our control actions wisely, and achieve the level of protection we need.

THE TOTAL MAXIMUM DAILY LOAD PROGRAM

As we look to manage our watersheds more holistically, the Total Maximum Daily Load (TMDL) program is one of our key CWA tools. In enacting Section 303(d), Congress retained a water quality-based approach for waters that remained polluted after the application of technology-based and other controls. TMDLs do not themselves require compliance; they simply establish a pollution budget for impaired waters. This information is key to determining what actions should be taken in a watershed to address ongoing water quality problems. The TMDL is then translated into permit requirements for point sources. For other pollution sources, the program relies on local, State, Tribe and Federal watershed plans and programs to achieve implementation of the TMDL.

This part of the CWA was not a priority for about 20 years while EPA focused primarily on industrial and municipal dischargers. Few States were addressing the TMDL requirements in the CWA until the wave of litigation began in the early 1990's, when environmental groups, anxious to get the program off the ground, filed lawsuits in a total of 40 States. EPA and States now operate the TMDL program pursuant to judicial settlements or decrees in 22 States. Prior to 1999 fewer than 1,000 TMDLs were completed. As of today, States and EPA have approved or established about 8,000 TMDLs. States and EPA continue to work to improve the quality of TMDLs and use TMDLs to achieve water quality goals on a watershed-basis.

Because TMDLs are water-quality based, they can be information-intensive, sometimes prompting widespread and systematic monitoring to identify and characterize problems and priorities, and to track progress in solving them. Public involvement can contribute to this information process both directly and through increased visibility for problem-solving. In addition, such public involvement can help make sure that TMDLs get translated from allocations into action, because information brought before the public is itself a driver for action.

WATER QUALITY TRADING

EPA believes that water quality trading, which allows sources to find the least cost alternative to achieving clean water, can be a critically important tool for restoring impaired watersheds efficiently and cost effectively. In its analysis of the Clinton Administration's Clean Water Initiative, EPA concluded that the total potential savings from all types of trading (point to point, point to nonpoint, and pretreatment) ranges from $658 million to $7.5 billion annually. Another study of three watersheds in the Midwest found that the cost of controlling phosphorus loadings from point and nonpoint sources could be reduced by 40 percent in Wisconsin and by more than 80 percent in Michigan when trading was applied between point and nonpoint sources. These examples illustrate the potential for water quality trading to reduce pollution with greater efficiency and to achieve significant water quality and environmental benefits.

Market-based approaches to improving the quality of the environment are not new. Air emissions trading programs date back to the Acid Rain program and the lead-in-gasoline phase-down programs implemented under the Clean Air Act. These and other programs have clearly demonstrated that market-based approaches can dramatically and quickly reduce emissions at substantially lower costs.

In January, EPA issued its 2003 Water Quality Trading Policy. The Policy provides guidance on aligning trading programs with the Clean Water Act and implementing regulations and identifies common elements of credible trading programs. The Policy supports trading to improve or preserve water quality in a variety of circumstances. In unimpaired waters, trading may be used to preserve water quality by offsetting new or increased discharges of pollutants. In waters impaired by pollutants, trading may be used to achieve earlier pollutant reductions and progress toward water quality standards in advance of the development of a TMDL. And, trading may be used to reduce the cost of achieving reductions contemplated by a TMDL. The Policy highlights existing Clean Water Act flexibility that can facilitate trading programs and emphasizes the need for accountability and safeguards to ensure that trading programs protect our resources and maintain progress toward attaining water quality standards.

Key Principles and Safeguards for Water Quality Trading

A number of core principles and environmental safeguards form the foundation of EPA's Water Quality Trading Policy, and these principles help ensure that trading programs create actual pollutant reductions, avoid hotspots, provide accountability for trading activity, and involve the public:

- Trading programs operate within the existing regulatory structure and are consistent with all aspects of the Clean Water Act.
- Trading programs are designed to meet water quality goals including TMDLs.
- Trading programs ensure that water quality standards are not exceeded.
- Trading programs retain enforceability of National Pollutant Discharge Elimination System (NPDES) permits.
- Trading can be used to comply with water quality-based effluent limitations; however, EPA does not support trading to comply with existing technology-based effluent limitations except as expressly authorized by Federal regulations.
- Trading programs include accountability mechanisms for nonpoint sources that trade to ensure that promised pollutant reductions actions are taken.
- Trading programs are visible and engage the public in program design.
- Trading programs monitor to ensure anticipated load reductions are achieved, or to take corrective action if loads are not adequately reduced.
- Trading is voluntary and based on collaboration among watershed stakeholders. States and Tribes may choose to establish trading programs in accordance with EPA's Policy. There is no requirement to implement or participate in a trading program.

Water Quality Trading: Examples of Environmental Innovation

We already see evidence that water quality trading programs work. For example, the State of Connecticut's nitrogen credit exchange program is expected to save the State an estimated $200 million in control costs through trading, while also making significant gains in cleaning up pollutants in Long Island Sound.

In the Cherry Creek watershed in Colorado, a trading program conducted in conjunction with a TMDL has reduced phosphorus loads to the Cherry Creek watershed by approximately 450 pounds per year. The nonpoint source projects that were implemented to create the phosphorus credits have provided ancillary environmental benefits such as flood control and wildlife habitat. A partnership trading effort in Illinois' Piasa Creek along the Mississippi River will save several millions in capital improvements to an aging drinking water treatment facility, while reducing sediment loads to the Mississippi River. The Grasslands selenium trading program in California, the nation's first nonpoint source cap and trade program, utilized an innovative penalty and rebate system to create economic incentives to substantially reduce selenium levels in Kesteron reservoir that were adversely harming bird populations.

Experience with trading has also taught us that trading will not work everywhere. For example, the level of pollutant reductions that would need to be achieved from all sources in a given watershed may be such that additional, or surplus, reductions cannot be achieved so as to allow trading. Certain watersheds may not have the number and mix of sources necessary for trading to be successful. In addition, trading programs that work in one State or Tribal area may not be successful in others. Just as each watershed has unique characteristics and needs, each trading program will be tailored by State agencies and stakeholders to meet environmental goals. EPA recognizes that States and Tribes face diverse water quality issues, sociological and economic factors and political considerations. EPA's Trading Policy is intended to provide consistent guidance, while allowing sufficient flexibility for States and watershed stakeholders to create workable solutions.

EPA believes that water quality trading programs, where carefully designed and implemented, can be powerful and effective tools for States, Tribes, local governments and citizens to use in achieving the goals of the Clean Water Act, while also saving taxpayer dollars.

WATERSHED-BASED PERMITTING

An important part of the watershed approach includes fostering innovations that provide data and information in ways that allow stakeholders at the local level to better assess and address their unique problems. Watershed-based permitting is one such innovation. To clearly communicate support for watershed-based permitting, on January 7, 2003, we issued the Watershed-based Permitting Policy.

Watershed-based NPDES permitting is an approach to developing NPDES permits for multiple point sources located within a defined geographic area (watershed boundaries). Through this approach, NPDES permitting authorities consider watershed goals and the impact of multiple pollutant sources and stressors, including nonpoint source contributions. Watershed-based permitting may encompass a variety of activities ranging from synchronizing permit issuance within a basin to developing water quality-based effluent limits using a multiple-discharger modeling analysis.

To better understand how watershed-based permitting approaches work, EPA is working with permit holders and State agencies to document different approaches currently being implemented. The lessons learned from these approaches are documented in a series of case studies featuring watersheds across the country. The case studies provide background information on the watershed, give an overview of the permitting strategy or project goals, and describe the expected outcomes and measures of success. These case studies will provide stakeholders with the information and lessons learned necessary for implementing this approach in other watersheds. Current case studies include: the State of Connecticut and the Long Island Sound; State of North Carolina and the Neuse River; and ConocoPhillips in Colorado. Municipal case studies include Louisville-Jefferson County, Kentucky; Sanitation District #1 in Kentucky; and Clean Water Services in Oregon. These case studies are available on EPA's web site at www.epa.gov/npdes. EPA has also been working with municipalities through the CWA section 104(b)(3) grants program to investigate additional ideas and approaches.

To help interested parties implement watershed-based approaches, EPA published draft Implementation Guidance in the *Federal Register* on August 25, 2003 (we are soliciting comments until Sept. 24th). Technical Guidance, which will focus on developing permit requirements and procedural issues for permit development and issuance, will be issued later this Fall. In addition, EPA is providing training course materials, brochures, speaking at conferences and meetings all designed to create a network for sharing lessons learned, and innovative approaches to NPDES permitting.

STORMWATER

I am informed that the Subcommittee is interested in the stormwater program, particularly our efforts to implement the Phase II Rule that became effective on March 10, 2003. Stormwater runoff from urban, agricultural, and industrial areas is the most common problem affecting our nation's rivers, lakes and coastal waters. In the latest reports from the States, urban runoff was cited as the source of impairments on 34,871 miles of rivers and streams, 7.7 million acres of lakes, and 5,045 estuary square miles. EPA's NPDES program addresses stormwater runoff from urban as well as industrial areas.

Stormwater Phase I

The Clean Water Act directs EPA to address stormwater from urban and industrial sources, including construction sites. In 1990, EPA promulgated Phase I of the stormwater program. That rule requires permits for the control of stormwater discharges for communities with populations over 100,000, construction sites disturbing more than five acres, and many categories of industrial facilities. Over the last 13 years, EPA has worked closely with the States and municipalities to implement the stormwater program. Many have risen to the challenge and developed excellent, comprehensive programs. San Diego's "Think Blue" campaign is a highly successful effort that educates local citizenry on the impact of daily life on one of the City's most precious resources: the Pacific Ocean. The city of Austin, Texas has developed a comprehensive program to protect the Edwards Aquifer and the famous Barton Springs recreational area that includes local ordinances and comprehensive educational and voluntary efforts and involves a wide spectrum of homeowners, de-

velopers, and industry. Another successful effort involved the cleanup of the lower Charles River that runs through Boston. The city of Boston focused on detecting and eliminating illicit discharges to its storm sewer system. This effort has lead to the discovery and removal of dozens of illicit discharges and prevented over 1 million gallons of contaminated flows from entering the River.

Stormwater Phase II Implementation

Phase II of the stormwater program requires smaller communities located in urbanized areas to develop and implement storm water controls to restore and maintain local water resources. Phase II also extends permitting requirements to construction activities that disturb between one and five acres of land.

At present, 45 States are authorized to administer the NPDES program and thus issue permits, including storm water permits, in their respective States. These States are also responsible for working with communities to implement the Phase II requirements. Unfortunately, implementation of this program happens to coincide with one of the most serious economic crises facing State and municipal governments. State governments are reducing their budgets and their staffs and are also reducing the funds they normally provide to communities. These budget problems are affecting the ability of States and communities to implement these new stormwater requirements. In short, implementation is going a bit slower than expected.

There are two important milestones that are good indicators of State progress in implementing the Phase II program—issuance of NPDES permits to municipal separate storm sewer systems (MS4s) and to construction sites disturbing 1 to 5 acres. EPA has encouraged States to use general permits to cover all activity within a regulated category for the entire State—issuing one general permit for construction and one for MS4s. To date, approximately 28 of the authorized States have issued permits for MS4s and approximately 34 have issued permits for construction activity. Indications are that the other States are working hard to finalize these permits and all are expected to have them finalized within the next year.

EPA was behind schedule in reissuing its construction general permit (issued on July 1, 2003), and several of the EPA Regional offices (Regions II, VI, IX, X) still have not issued permits for MS4s in those handful of States where EPA remains the permitting authority. However, two of these Regions (VI, and IX) have proposed permits.

We have anecdotal information that many communities did not meet the deadline for applying for and obtaining permit coverage, often due to the fact that there was no State permit in place under which they could apply for coverage. Because of the real economic problems causing delays, EPA is taking a supportive approach to helping States and communities come into compliance with these requirements. It is also important to keep in mind that the Phase II regulation allows communities 5 years to develop and implement their programs; therefore, full implementation is not expected until 2008.

To assist States and communities, EPA is working on a number of fronts. First, financing is critically important. As you know, the 1987 Amendments to the Clean Water Act created the State Revolving Fund (SRF) system. Every State and Puerto Rico now operates a successful revolving fund that provides low-interest loans to fund a wide variety of projects to clean up rivers, lakes, coastal waters. The President's fiscal year 2004 Budget extends the Federal commitment to capitalize the CWSRF through fiscal year 2011, providing an additional $21 billion in loans over the next 20 years. We continue to work with each State and are encouraging them to target their financing toward important water quality efforts, including stormwater projects.

EPA has been working to develop useful tools to assist States and communities as they implement this new program. EPA has developed a comprehensive "Menu of Best Management Practices" to help communities plan design all aspects of their stormwater programs. In addition, EPA has produced guidance on developing measurable goals to help States and communities evaluate the effectiveness of their programs. Finally, EPA has invested considerable effort in its stormwater website (www.epa.gov/npdes/stormwater) to ensure that States and communities have the tools and information they need.

Oil and Gas Extension

I understand that the committee is also interested in hearing about the extension EPA recently finalized for oil and gas construction activities. When EPA wrote the Phase II regulation over 5 years ago, we significantly underestimated the number of oil and gas sites that would be affected. Since that time, EPA has become aware of new information on the impact of the regulation on this industry indicating that

it may impact as many as 30,000 facilities. Additionally, questions have been raised about the appropriateness of some aspects of the program for these sites. Considering these factors, EPA decided to postpone the effective date of these requirements until March 10, 2005. Over the next 2 years, we intend to analyze the impact of these regulations on the oil and gas industry and to evaluate the appropriateness of the program requirements.

CONCLUSION

All of the tools I have been discussing represent a major programmatic shift that is necessary to make further progress in cleaning up America's waters. It is time to expand our focus: from an almost exclusively point source orientation to one that examines all sources of pollution, including nonpoint; from relying largely on technology-based standards to a water quality-based approach; and, from emphasizing inputs to focusing on environmental outcomes. We have made tremendous progress in cleaning up our waters over the past three decades—an achievement that is even more remarkable in view of substantial increases in our population. As a Nation, we can be proud of how far we have come. These successes should strengthen our resolve to complete the hard work ahead.

Thank you. I look forward to your questions.

RESPONSES BY TRACY MEHAN TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1a. In March 2003, the Phase II Storm Water Rule went into effect, requiring States and municipalities to begin developing and implementing management plans and general permits for stormwater runoff in urbanized areas. Last year, this Committee approved an amendment, signed into law as part of the Great Lakes and Lake Champlain Act of 2002, that provided a 1-year fix for States to retain maximum flexibility in utilizing Section 319 funding for addressing stormwater concerns. What is the current status of a State's ability to utilize 319 funds for Phase II programs and activities? What will the status be at the start of the fiscal year 2004 budget cycle?

Response. Under the Great Lakes Legacy Act of 2002, States may use Section 319 funds that are appropriated in fiscal year 2003 "to carry out projects and activities in the State related to the development or implementation of Phase II of the storm water program." Therefore, States may use fiscal year 2003 Section 319 funds for that broad set of purposes. So long as fiscal year 2003 funds are being used, EPA understands the law to provide that they may continue to be used for these stormwater Phase II purposes even in fiscal year 2004 and beyond. In contrast, any funds that are appropriated in fiscal year 2004 and beyond must be utilized consistent with Section 319 of the Clean Water Act.

Question 1b. If Congress does not provide another temporary extension providing States with flexibility to utilize 319 funds for Phase II activities, will 319 funds be eligible for use in Phase II geographic jurisdictions in the future?

Response. EPA described the extent to which stormwater activities may be eligible for Section 319 funding in guidance, originally issued in May 1996 and re-issued in October 2003. This guidance provides that Section 319 funds may be used to fund any urban storm water activities that are not specifically required by a draft Phase I or II permit. EPA based this guidance on Congress' direction in Section 319(h) that the funds be used by States to implement their nonpoint source management programs approved under Section 319(b), which by its terms addresses only nonpoint sources and not permitted point sources.

The guidance provides some examples of stormwater activities that may be funded under Section 319. These include:

- Technical assistance to State and local stormwater programs;
- Monitoring needed to design and evaluate effectiveness of implementation strategies;
- BMP's "except for BMPs required by a draft or final NPDES permit";
- Information and education programs;
- Technology transfer and training; and
- Development and implementation of regulations, policies, and local ordinances to address stormwater runoff (which may apply to areas covered by NPDES permits, provided that they apply to non-permitted areas as well).

In addition, EPA notes that a variety of watershed restoration activities fall outside the scope of Phase II permit requirements and are thus also fundable under Section 319 in all areas.

Question 1c. During an EPA briefing with Committee staff, the agency indicated a list of stormwater activities that would be eligible to receive Section 319 funding, including "monitoring and evaluation", information and education", and development of enforceable policies". As many of these items are specifically required to be included in Phase II NPDES permits under the rule's six minimum control measures, would you identify what guidance the agency is providing to States to clarify 319 uses as they proceed with development and implementation of their Phase II programs?

Response. As indicated in the response to the preceding question, EPA believes that it is appropriate to recognize that some activities which generally support implementation efforts should logically be implemented in a consistent manner across both permitted and non-permitted areas. Monitoring and evaluation, information and education, and the development of enforceable policies are good examples of this. EPA believes that if a State wishes to establish a State-wide program for such general purposes as to promote monitoring and evaluation of urban stormwater controls or to provide information and education to citizens, such activities will equally benefit both the municipal separate storm sewer systems subject to NPDES permits and those other areas of the State that remain subject to the NPS program. For this reason, EPA believes that such activities are 319-eligible even though they may apply to areas covered by NPDES permits, provided that they apply to non-permitted areas as well.

RESPONSES BY TRACY MEHAN TO ADDITIONAL QUESTIONS FROM SENATOR INHOFE

Question 1. One of the later witness' testimony expresses concern about trading in mercury. You have a pilot project in San Diego that addresses mercury trading. Can you describe this project for the Committee?

Response. The pilot project referred to is taking place in the Sacramento River basin and is exploring whether trading could be used to offset a future discharge of mercury from the Sacramento Regional Wastewater Treatment Plant. The plant's NPDES permit, issued by the State of California, requires the plant owner and operator, Sacramento Regional County Sanitation District, to perform a feasibility study to identify possible opportunities for mercury offsets (e.g., reduction of mercury loads from abandoned mine sites). If the State approves the study, it could choose to reopen the permit and allow the plant to offset the plant's discharge above its current limit of 5.1 pounds per year. The plant's discharge is currently lower than 5.1 pounds per year, but may exceed 5.1 pounds per year in the future due to increased flows resulting from population growth. In 2002, EPA provided $50,000 in project funding to the U.S. Geological Survey for the development of a decision support tool to assist in determining if mercury offsets are feasible. We have not received requests to review any such project other than the Sacramento offset pilot. EPA's 2003 Water Quality Trading Policy generally does not support the trading of bioaccumulative toxic pollutants except within a pilot project.

Question 2. As I mentioned in my opening statement, I am very concerned about giving EPA authority, through the TMDL program, to veto local land use decisions. If EPA is given authority to approve more than just the TMDL number itself, including individual allocations to categories and subcategories of users, how do you anticipate the TMDL program working without hindering local and individual land use decisions?

Response. Under the current (1992) TMDL program regulations, EPA approves the loading capacity for a waterbody and the initial allocations for sources of pollutants including point sources (wasteload allocations) and nonpoint sources (load allocations). EPA believes that the TMDLs must include adequate information to show that the allocations will result in attainment of water quality standards. EPA does not approve or disapprove implementation plans as part of the TMDL and therefore does not get involved in local decisions, but relies on the States to identify the best methods and approaches for achieving the load allocations. Once the TMDL's initial allocations are approved, States have a significant degree of flexibility to work with stakeholders in a watershed to use a range of different approaches to implement these allocations in the TMDL and, if appropriate, adjust them to achieve water quality standards more efficiently.

Question 3a. The House Report for the Water Quality Renewal Act of 1984 explains that Section 402(I)(2) of the Clean Water Act was "developed . . . in recognition of the fact that there are numerous situations in the mining and oil and gas industries where storm water is channeled around plants and operations through a series of ditches and similar devices in order to prevent pollution contamination

of the storm water." During his testimony, Mr. Lee Fuller—minority staff director to the Committee on Environment and Public Works during the drafting of the 1987 amendments—further explained Congressional intent to distinguish between contaminated and uncontaminated runoff. Congress had not anticipated the agency would attempt to regulate all uncontaminated runoff through the industrial portion of the storm water program.

Can you explain what EPA believes Congress' intent was when it wrote Section 402(l)(2) of the Clean Water Act and where it believes it derives the authority to regulate uncontaminated runoff from oil and gas sites?

Response. CWA section 402(l)(2) exempts from NPDES permitting requirements storm water runoff from oil and gas facilities that is composed entirely of flows from conveyances used for collecting and conveying runoff that are not contaminated by contact with raw materials, petroleum products or wastes located at the site. EPA requires permit coverage for a long list of industries and focuses the permit requirements on the likely pollutants from each specific industry. Oil and gas is one of the industries included in EPA's multi-sector general permit (MSGP). However, due to the CWA section 402(l)(2) exemption, oil and gas facilities need to apply for permit coverage only if they discharge waste water or storm water that does not meet the requirements of the exemption. EPA believes that Congress's intent was to exempt from permit coverage only uncontaminated runoff, not contaminated discharges of oil or hazardous substances.

Question 3b. Will you please then explain the history behind EPA's decision to provide oil and gas sites with a 2-year delay to comply? For instance, what information did EPA have, and when did they have it, about the impact the rule would have on oil and gas sites?

Response. When EPA finalized the Storm Water Phase II rule in December 1999 (64 FR 68722), we thought that very few oil and gas facilities would be subject to the Phase II rule because information the Agency received through a member of the storm water subcommittee of the Urban Wet Weather Federal Advisory Committee suggested that most oil and gas sites were either over five acres or under one acre. In the summer of 2002, EPA learned through data submitted by States and industry representatives that the number of oil and gas sites that would be subject to the Phase II rule was significantly greater than originally estimated. In order to verify the information submitted by States and the oil and gas industry, EPA requested and used data from the Energy Information Administration (EIA). The EIA is a statistical agency of the U.S. Department of Energy that serves as the primary clearinghouse for all energy-related data in the U.S., including data pertaining to the oil and gas industry. The EIA data confirmed that the number of oil and gas sites potentially subject to the rule was significantly more than what we had assumed during development of the Phase II rule. EPA is using the 2-years to more thoroughly understand and consider the impacts of the construction requirements on oil and gas sites. EPA is also evaluating the applicability of the 402(l)(2) exemption to oil and gas construction sites.

Question 4a. Does the Office of Water review and approve the design plans for treatment works that receive EPA funds? Has EPA ever funded plants that have included blending during infrequent wet weather events in their designs?

Response. The Office of Water provides funds for treatment works through the Clean Water State Revolving Funds (CWSRF), the Clean Water Act Title II Construction Grants Program (Construction Grants) and/or Special Project grants (Special Projects) appropriated by Congress. States, not EPA, have the responsibility for reviewing and approving nearly all design plans for treatment works that receive these funds.

The CWSRF is the Federal Government's primary funding source for municipal wastewater treatment works. EPA provides CWSRF capitalization grants to States which, in turn, contribute matching funds and make project funding loans. The CWSRF is authorized as a State-run program.

The Construction Grants program was, prior to 1987, the Federal Government's primary funding source for municipal wastewater treatment works and its operation, including review and approval of all design plans for treatment works, was entirely delegated to States under authority of the Clean Water Act.

Special Projects are individually designated by Congress each Fiscal Year. Congress has not required EPA to review and approve the design plans for these projects.

It is possible that the CWSRF, Construction Grants program and/or Special Projects appropriations have provided funds for facilities or components of facilities that have included in their designs blending of primary treated wastewater with biologically treated wastewater to protect the integrity of the treatment system dur-

ing wet weather while still ensuring that discharges meet established secondary treatment limits. The Agency does not centrally track this type of information.

Question 4b. In a recent briefing of Committee staff, representatives for the environmental community claim EPA has not allowed municipalities to "blend" at their treatment plants. They further claim that if EPA permits blending, this would be a new position for the agency. What has the Office of Water's position been on allowing treatment works to blend water during peak storm events?

Response. Reducing the frequency and volume of collection system overflows and backups of sewage into buildings, and improving the structural integrity of collection systems have been some of the major objectives of EPA's emphasis on wet weather discharges over the last decade. Typically, an important component of strategies to reduce collection system overflows and backups into buildings is to increase the delivery of wet weather flows to the treatment plant. The volume of wet weather flows delivered to treatment facilities can also be increased by measures that reduce exfiltration of wastewater out of a collection system. Increased wet weather flow volumes at treatment plants, along with increased attention to water quality problems caused by wet weather flows have lead to increased attention to the manner by which publicly owned treatment works (POTWs) manage wet weather flows.

As these issues received greater attention, regulatory agencies, municipal operators of POTWs, and representatives of environmental advocacy groups have expressed confusion over and requested clarification regarding the proper interpretation of certain regulatory provisions in the context of wet weather flow management at POTW treatment plants. Of particular concern are National Pollutant Discharge Elimination System (NPDES) permit requirements for peak wet weather discharges from a treatment plant when those discharges are comprised of peak wet weather flows (i.e., incoming sanitary wastewaters are more dilute due to wet weather influences) that are routed around biological treatment units and blended with the flows from the biological units (or other advanced treatment units) prior to discharge. Such re-routing where the capacity of biological (or other advanced) treatment units is exceeded might be necessary to avoid damaging the treatment units. Questions have focused primarily on the situation where the final discharge of these blended waste streams would meet effluent limitations based upon the secondary treatment regulations and any more stringent limitations necessary to meet water quality standards. EPA's proposed clarification of its interpretation of these regulations, along with draft implementation guidance, was published in the Federal Register for public comment on November 7, 2003. EPA intends its policy would provide a framework that:

(1) ensures appropriate management of wet weather flows at a POTW consistent with generally accepted good engineering practices and criteria for long-term design,

(2) clarifies technology-based requirements

(3) uses water quality-based effluent limitations to address residual site-specific health and environmental risks, and

(4) provides appropriate safeguards, including a monitoring scheme and protection for sensitive waters.

The draft policy addresses only the limited situations where blended wet weather POTW effluent meets permit limitations. EPA's intention is to ensure that NPDES requirements be applied in a nationally consistent manner that improves the capacity, management, operation and maintenance of POTW treatment plants and collection systems and protects human health and the environment.

RESPONSES BY EPA'S OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE TO ADDITIONAL QUESTIONS FROM SENATOR INHOFE

Question 1. EPA had cited several aviation fuel providers for not having secondary containment for their trucks. Aviation fuel providers were shocked at the application of these regulations to their vehicles. It had long been the understanding of the industry that the secondary containment requirement of the SPCC rules did not apply to aviation fuel trucks used on airports. This had been confirmed by approval of many airport SPCC Plans that do not address this requirement for aviation fuel trucks. The aviation industry has sought to work with the EPA to provide the agency with an understanding of the inappropriateness of imposing this requirement on aviation fuel trucks, yet the agency has been slow to respond to these concerns and seems little interested in recognizing the unique nature of airport fueling operations. What steps will the EPA take to ensure that aviation fuel providers, particularly those at smaller non-commercial airports, are not unduly burdened by impos-

ing secondary containment requirements on fuel trucks used only to transport and deliver such products?

Response. EPA has been involved in an active dialog with the aviation industry, including fuelers, on the applicability of the SPCC requirements to this industry sector. We have discussed their concerns within EPA and intend to provide guidance on these activities. EPA is currently focusing primarily on resolving litigation related to the 2002 final rule, but expects to address questions regarding the applicability of containment requirements by February 2004, in time to allow the development of revised SPCC Plans by the August 17, 2004 compliance deadline. We plan to discuss issues associated with revised SPCC plans with the regulated community, including representatives of smaller airport fuel providers, before any guidance is communicated in final form.

Additional Background: The Spill Prevention Control and Countermeasures (SPCC) regulation (40 CFR § 112) which has been in effect since 1974 was recently amended in a 2002 final rule. The regulation applies to non-transportation-related facilities with a total aboveground (i.e., not completely buried) oil storage capacity of greater than 1,320 gallons. To be regulated, in addition to the storage capacity criteria, a facility must due to its location reasonably be expected to discharge oil into navigable waters of the U.S. or adjoining shorelines.

The main requirement of facilities subject to the regulation is the preparation and implementation of a Plan to prevent the discharge of oil into waters of the United States. These Plans are certified by a professional engineer and not subject to Agency approval. Mobile fuelers operating exclusively within the confines of a facility (such as an airport) are considered non-transportation related and, therefore, subject to SPCC requirements which must be addressed in the airport SPCC Plan or in a separately maintained SPCC Plan.

Question 2. What is the basis for EPA determining that the previous rule was incapable of planning for spill prevention at loading operations for oil and natural gas exploration and production facilities and that these facilities needed to provide secondary containment around the loading area rather than another approach, such as a simple mechanism to capture any spilled product? Many of these loadings are done infrequently because of the low production volumes of these marginal wells.

Response. This question appears to be directly related to the "loading rack" issue currently subject to litigation. EPA is actively involved in settlement discussions in the hopes of resolving that litigation. Additionally, EPA has met with stakeholders outside of the litigation on this, as well as other, issues. We expect to be able to discuss this issue more fully within the next one or 2 months.

Question 3. The USDA Natural Resource Conservation Service (NRCS) fully understands how farms impact their environment and works very closely with farmers to minimize those impacts through best management practices, not heavy-handed Federal regulation. The Farmers in my State of Oklahoma correctly believe the NRCS has a much better appreciation for the daily struggle of maintaining a farm in today's economy than EPA does while keeping the environment always in mind. Is there a means by which EPA could work through or with the NRCS to help farmers address any pollution problems—which have not been documented—with their tanks?

Response. Over the past 6 months we have initiated dialog with representatives of the agricultural sector regarding the SPCC regulation. We are aware of the concerns of this sector and are committed to working with them in partnership with the United States Department of Agriculture (USDA) to address their concerns. We plan to work with USDA to develop guidance to help farmers effectively meet the SPCC spill prevention requirements. We believe the performance-based nature of the SPCC rule (which allows waivers of most requirements when "equivalent environmental protection" is provided) allows for the flexibility needed by small businesses such as farms.

RESPONSES BY TRACY MEHAN TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS

Question 1. Can you describe the relative contribution of storm water versus other sources of pollution to the 45 percent of the nation's waters that remain impaired, including a description of the types of pollutants normally found in storm water and the change in pollutant content that could be expected in cold weather climates? What role does transportation infrastructure play in generating storm water runoff.

Response. EPA compiles data on water quality impairments and sources of impairments consistent with the requirements of Section 305(b) of the Clean Water Act. The most recent biennial report for which data are available is from calendar

year 2000 (2000 National Water Quality Inventory Report). In that report, EPA presents data independently for three significant types of waterbodies: rivers and streams, lakes and reservoirs, and coastal resources. The report defines a number of categories for sources of waterbody impairments. Many of these are storm water management related. Following is impairment data for each of the waterbody types:

Rivers and Streams.—Of miles assessed, 39 percent are impaired (a total of 269,258 miles out of the 699,946 miles assessed). Of the total, following is the percent of the impairment due to the identified source: Agriculture 48 percent, Hydrologic Modification 20 percent, Habitat Modification 14 percent, Urban Runoff/Storm Sewers 13 percent, Forestry 11 percent, Municipal Point Sources 10 percent, Resource Extraction 10 percent.

While not clearly delineated as storm water sources, other than the municipal point sources, all of the other sources are likely heavily influenced by storm water runoff.

Lakes.—Of the acres assessed, 45 percent are impaired (a total of 7.7 million acres out of the 17.3 million acres assessed). Impairment sources are as follows: Agriculture 41 percent; Hydrologic Modifications 18 percent; Urban Runoff/Storm Sewers 18 percent; Nonpoint Sources 14 percent; Atmospheric Deposition 13 percent; Municipal Point Sources 12 percent; Land Disposal 11 percent.

Coastal Resources.—Of the square miles assessed, 51 percent are impaired (15,676 square miles out of 31,072 square miles assessed). Impairment sources are as follows: Municipal Point Sources 37 percent; Urban Runoff/Storm Sewers 32 percent; Industrial Discharges 26 percent; Atmospheric Deposition 24; percent; Agriculture 18 percent; Hydrologic Modifications 14 percent; Resource Extraction 12 percent.

Common pollutants found in storm water include pathogens, nutrients, sediment, oil and grease, toxic metals, and debris. In cold weather climates, road salts are an additional pollutant of concern that have been shown to impact water quality.

Transportation infrastructure can play a significant role in storm water runoff. Annual pollutant loads generated from roads and associated facilities were estimated as part of the Agency's ongoing effort to develop national guidelines for the construction and development industry (FHWA 1996, 2001, HUD 2002, USDA 2000, NWS), however they are likely overestimates because they do not account for in-place management practices to control storm water runoff.

Question 2. What is EPA's cost estimate for mitigating the impact of storm water runoff?

Response. It is very difficult to reliably estimate the cost to mitigate the impact of storm water runoff. EPA's Clean Watersheds Needs Survey 2000 Report to Congress developed a modeled estimate for municipal storm water management programs. This total capital cost of $8.4 billion represents the estimated Clean Water State Revolving Fund-eligible portion of costs to develop and implement storm water programs for municipal separate storm sewer systems (MS4s).

Question 3. What is EPA doing to ensure that post-construction storm water discharges are addressed?

Response. EPA has several regulations that address the impacts of post-construction runoff on water quality. The medium and large municipal separate storm sewer systems (MS4s), covered by the regulations promulgated in November 1990, must develop, implement, and enforce programs to reduce the discharge of pollutants from areas of new development and significant redevelopment. Specifically, these programs are to address controls to reduce pollutants in discharges from MS4s after construction is completed. The small MS4s, covered by the regulations promulgated in December 1999, must develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb one acre or more. These programs must include strategies appropriate for the communities and are to: include both structural and non-structural controls; use an ordinance or other regulatory mechanism; and ensure adequate long-term operation and maintenance of BMPs.

Additionally, EPA's recently reissued construction general permit (July 1, 2003), applicable to construction projects disturbing one acre or greater, requires construction site operators to identify all post-construction storm water management measures that will be installed during the construction process to control pollutants in storm water discharges after construction activities have been completed. Such measures are to be designed and installed in compliance with any applicable Federal, State, tribal, or local requirements.

Question 4. Can you describe some of the cases in which EPA and/or the Department of Justice have used section 309(c)(1) to prosecute cases that involved primarily environmental harm?

Response. Please note that the response to this question regarding the CWA negligence provision was prepared by EPA'S Office of Enforcement and Compliance Assurance.

The Clean Water Act negligence criminal offense, 33 USC § 1319(c)(1)(A), is an essential enforcement tool that reaches illegal conduct resulting in significant and avoidable environmental harm that would likely otherwise go unprosecuted, such as in the case of the *Exxon Valdez* oil spill (see case summary, below). The Agency, in concert with Federal prosecutors, has reserved the use of this provision for appropriate circumstances, including violations where corporations or their employees have failed to take proper measures to prevent discharges of substantial quantities of pollutants into our nation's waters despite the fact that such discharges were reasonably foreseeable. The Agency stands behind its record of using this provision in a fair and just manner that promotes prevention of such pollution in the future, while ensuring that no entity or individual is punished for a mere accident.

Some of the CWA negligence prosecutions that were initiated primarily because of environmental harm are described below:

Recent examples

U.S. v. *Omar Mining* (S.D. W. Va. 2003).—On February 24, 2003, Omar Mining was sentenced for negligent violations of the Clean Water Act, 33 U.S.C. § 1319 (c)(1)(A). The company was sentenced to 60 months of probation and ordered to pay a criminal fine of $200,000. Omar Mining was also required to implement an environmental management system and undergo annual third-party environmental audits.

On August 12, 2001, a 15,000-gallon black water spill occurred at the Omar Mining facility. The spill resulted from the company's failure to monitor underground water levels during the underground injection of waste water. The West Virginia Department of Environmental Protection ("WVDEP") allowed the excess water from the mine to be pumped out through a permitted discharge point.

On August 23, 2001, WVDEP detected a fish kill in the creek downstream from Omar Mining. The fish kill was traced back to Omar Mining where it was discovered that the company had re-routed the mine pumping operation to an unpermitted holding pond discharge point formerly used to settle out heavy metals from mine runoff. Subsequently, an Omar Mining supervisor activated a water treatment facility connected to the pond, but failed to monitor the amount of treatment material flowing into the pond. These actions resulted in the fish kill.

Prior to the initiation of the criminal negligence prosecution, Omar Mining was the subject of a large number of civil enforcement and administrative actions by WVDEP.

U.S. v. *Richard Anthony* (W.D. Va. 2002).—On January 29, 2002, Richard Anthony, owner and president of Sanville Utilities, Inc., in Bassett, Virginia, was criminally charged for negligently discharging pollutants without an NPDES permit into Blackberry Creek, a water of the United States, in violation of 33 U.S.C. § 1319(c)(1)(A). Sanville Utilities operated the Fairway Acres wastewater treatment plant ("WWTP") which provided sewage treatment services for a small apartment complex and single-family home community. Richard Anthony served as the sole operator of the WWTP for a period of years, however, he abandoned the plant in September 1999 after its NPDES permit expired, leaving the plant to discharge untreated sewage into Blackberry Creek—an estimated 1.2 million gallons of raw sewage per day for a minimum of 1 month. The Virginia Department of Health issued a health emergency notice in response to the sewage discharge which occurred between September 8, 1999 and September 27, 1999. On April 23, 2002, Richard Anthony pled guilty to one count of negligently violating the Clean Water Act. On July 11, 2002, Anthony was sentenced to serve the maximum 12 months in prison, followed by 12 months of supervised release. Restitution was ordered in the amount of $31,068.73.

U.S. v. *Koch Petroleum Group,* L.P. (D. Minn. 2000).—On September 28, 1999, Koch Petroleum Group, L.P. ("Koch"), was charged in a two count information with negligently violating the Clean Water Act, 33 USC §§ 1321(b)(3) & 1318(a) & 1319(c)(1). Koch admitted that it negligently discharged oil into a wetland area and an adjoining navigable water near Spring Lake Park Reserve, an area next to the Mississippi River in Dakota County, Minnesota. In early 1993, Koch knew that a tank had lost between 200,000 and 600,000 gallons of aviation fuel and that the fuel would reach surface water, but the company did not develop a plan to recover the fuel until June, 1997. While establishing a system to recover the fuel, Koch installed

a one-half mile long trench and booms in a wetland to prevent the jet fuel from reaching the Mississippi River, which had the effect of destroying a portion of the surrounding ecosystem and wildlife habitat. On March 1, 2000, Koch pled guilty to the information and was sentenced to 36 months of probation and was ordered to pay a criminal fine of $6,000,000. Koch was also ordered to pay $2,000,000 to Dakota County, Minnesota, for remediation of the Spring Lake Park Reserve.

U.S. v. *Plummer Excavating, Inc.* (D. Minn. 2000).—On April 21, 1999, Randy Lee Konickson, vice president of Plummer Excavating, Inc., and Plummer Excavating, Inc., were each indicted and charged with a misdemeanor count under the Clean Water Act, 33 USC § 1319(c)(1), for negligently discharging oil from a crude oil pipeline into waters of the United States. In September 1998, Konickson directed an employee to bury rocks in a field adjacent to the company's Plummer, Minnesota facility. Konickson knew the field contained buried pipelines. When the employee struck a crude oil pipeline with a backhoe, Konickson failed to notify the appropriate authorities. The pipeline ruptured and caused nearly 5,200 barrels or 218,000 gallons of crude oil to spill into the field and eventually into a county drainage ditch that flows into the Clearwater River. As a result of the spill, authorities evacuated the town of Plummer. On December 10, 1999, Konickson was sentenced to 2 years of probation and 100 hours of community service. On January 7, 2000, Plummer Excavating was sentenced to 36 months probation, and ordered to pay a criminal fine of $50,000.

Selected "historical"examples

U.S. v. *Puerto Rico Electric Power Authority* (D.P.R. 1998).—The Puerto Rico Electric Power Authority (PREPA) pled guilty to criminal negligence violations of the Clean Water Act, 33 USC § 1319(c)(1)(A), on June 1, 1998. The company's guilty plea followed an investigation by the Environmental Protection Agency in conjunction with the Federal Bureau of Investigation of a September 1995 sulphuric acid spill into the Bayamon River, on the north coast of Puerto Rico. The acid had been transferred to a wastewater storage tank that was not designed to withstand acid. As a result, about 270,000 gallons of highly acidic water spilled, contaminating the river and killing marine life.

PREPA was placed on a 2-year probation. Under its probation, PREPA agreed to establish environmental procedures and file quarterly reports in court showing that it is complying with environmental standards.

U.S. v. *Eklof Marine Corp.* (D.R.I. 1997)

On September 25, 1997, a three count information was filed charging defendants Eklof Marine Corporation, Thor Towing Corporation, Odin Marine Corporation, Leslie Wallin and Gregory R. Aitke with a negligent Clean Water Act count, and only the corporate defendants with a Rivers and Harbors Act count and a Migratory Bird Treaty Act count. This case involved a spill of approximately 828,000 gallons of heating oil being transported by barge off the coast of Rhode Island. The spill resulted from the confluence of four factors: (1) a severe winter storm, the forecast of which was disregarded—although other ships in the area had sought safe harbor; (2) an engine room fire on the tug, which the crew were not equipped to handle; (3) a jury-rigged anchor on the barge that was missing the necessary anchor winch because it was removed 2 weeks earlier for repair; and (4) poor maintenance of the tug and barge. The spill, by far the worst in Rhode Island history, killed hundreds of thousands of lobsters and other marine life, as well as hundreds of migratory birds. As a result of the spill, Rhode Island waters were closed to fishermen for months. Moreover, the oil washed up on Moonstone Beach, a federally protected marine sanctuary, and other fragile coastal areas.

As a result of the violations, the corporate defendants were ordered to pay a $7 million fine, an additional $1.5 million to the Nature Conservancy to purchase and preserve land in the area of the spill, and make an additional $1 million worth of remedial safety measures to its fleet of vessels. The vessel's captain, Gregory Aitken, was sentenced to 2 years probation and a $10,000 fine. Eklof Marine Corporation president, Leslie Wallin, was sentenced to 3 years probation and a $100,000 fine.

U.S. v. *Exxon Corp.* (D. Alaska 1991)

On March 24, 1989, the *Exxon Valdez* ran aground on Bligh Reef, spilling approximately 11 million gallons of oil into Alaska's Prince William Sound, affecting approximately 1,300 miles shoreline, with 200 miles considered "heavily or moderately oiled." The wildlife death toll from the immediate impact of the spill was estimated to be: 250,000 seabirds, 2,800 sea otters, 300 harbor seals, 250 bald eagles, up to 22 killer whales, and billions of salmon and herring eggs. As a result of this spill, the United States charged Exxon Shipping Company, the owner of the *Exxon Valdez,* and its parent, Exxon Corporation, with five criminal counts each, with the

lead count being under the Clean Water Act for negligent discharge of a pollutant without a permit in violation of 33 U.S.C. § 1319 (c)(1)(A). In March 1991, Exxon Shipping agreed to plead guilty to three misdemeanor counts, include the Clean Water Act violation and lesser charges under the Refuse Act and the Migratory Bird Treaty Act. Exxon Corporation pleaded guilty only to a violation of the Migratory Bird Treaty Act. The criminal fines and restitution totaled $125,000,000 ($25,000,000 of which was straight fine) still the largest amount in U.S. environmental history.

U.S. v. *Ashland Oil, Inc.* (W. D. Pa. 1988)

On January 2, 1988, one of Ashland Oil's storage tanks collapsed, spilling more than 500,000 gallons of oil into the Monongahela River outside of Pittsburgh. On September 15, 1988, a Federal grand jury indicted Ashland for negligently violating the Clean Water Act, 33 USC § 1319(c)(1)(A). The criminal investigation determined that routine tests were not conducted on the tank and that following proper, industry-standard procedures might have prevented the vessel from rupturing. Ashland Oil was ordered to pay a criminal fine of $2.25 million.

U.S. v. *Pennwalt Corp.* (W.D. Wash. 1988)

A tank owned and operated by Pennwalt Corp. containing chemicals collapsed and spilled more than 75,000 gallons into an adjacent tidal waterway. A grand jury returned indictments against both the corporation and three corporate officers, charging them with "negligently . . . discharging . . . certain hazardous chemicals . . . as the result of the collapse of a . . . poorly maintained . . . steel storage tank." The chief executive of Pennwalt entered a guilty plea on behalf of the corporation, acknowledging that Pennwalt had a duty to anticipate and perform such maintenance and take other appropriate steps as reasonably necessary to prevent releases of chemicals into the waters of the United States. The corporation paid a $1.1 million fine.

Question 5. The EPA website includes an extensive list of funding programs associated with storm water management. Can you identify which of those programs are explicitly for the purpose of storm water management? Please identify how much money in each of those programs has ever been spent on storm water management.

Response. Of the 32 funding programs associated with storm water management, none are exclusively for providing funds for storm water projects. Three of the most prominent funding programs that provide money for storm water projects are the Clean Water State Revolving Fund, Water Quality Cooperative Agreements (CWA section 104(b)(3)), and Nonpoint Source Implementation Grants (CWA section 319). EPA does not track funding specifically for storm water management in all grant programs, mainly because of the multi-faceted nature of storm water management. EPA does have data indicating that between 1991 and 2002, the Clean Water State Revolving Fund has spent $193 million on Storm Sewers. This investment excludes the investment in combined sewer overflow (CSO) and sanitary sewer overflow (SSO) correction. The Clean Water State Revolving Fund also spent over $1.6 billion on nonpoint source projects between 1990 and 2002, many of which addressed storm water runoff from urban and rural areas. For Section 319 grants, EPA estimates that from FY 1994 to FY 2002, at least $100 million was used for urban runoff projects. Additionally, EPA regularly funds research and demonstration projects to address storm water under Section 104(b)(3) cooperative agreements and in recent years has funded more than $5 million in storm water management projects.

Question 6. What is the implementation status of the storm water phase II program—how many States have completed their general permits?

Response. Phase II Municipal Separate Storm Sewer (MS4) permits—28 of the 45 States required to issue small MS4 permits have completed those efforts. Of the remaining 17 States, 4 have public noticed their draft permits, but several of these States have not finalized the permits because of the concerns about the impact of the recent 9th circuit ruling that requires some changes to EPA's small MS4 general permitting provisions. EPA was sued on 22 different aspects of the 1999 storm water phase II rule. The 9th circuit recently issued a final decision that supported EPA on all issues, except three aspects of the small MS4 general permit program. The court said that the Notices of Intent (NOIs) for small MS4s had to be public noticed; the public must have the opportunity to request a public hearing on the NOI; and the NOIs must be reviewed by the permitting authority. EPA is still reviewing the court decision to determine what actions EPA and the authorized States should take to comply. Three States plan to issue individual permits to small MS4s, and one has in fact issued some of those required permits. EPA Regions 1, 6, and 10 are responsible for issuing small MS4 general permits to cover the remaining five States. Region 1 has issued its permit, which covers two States. Region 6 proposed its permit, which covers one State, but has not finalized it due to concerns about

the 9th circuit ruling mentioned above. Region 10 has obtained individual permit applications from small MS4s in its two States and is in the process of trying to decide how to proceed due to the 9th circuit ruling.

Phase II Construction permits—33 of the 45 States required to issue small construction permits have completed those efforts. The EPA Regions have issued small construction general permits that are applicable in all five States where EPA is the permitting authority.

Question 7. The Agency's information provided in the public docket on this rulemaking cites only data from the Energy Information Administration, specifically Table 5.2 of the Monthly Energy Review, as the source for the estimate of 30,000 sites that will be affected—data, which has been collected by EIA since 1973. Why did EPA not review this data in 1999 when developing the original regulation?

Response. When EPA developed the Economic Analysis for the Phase II rule, the information obtained for the analysis showed that most sites were either over five acres, and therefore already regulated, or less than one acre, and therefore would not be covered by the construction permitting requirements of the rule. In developing this rule, we worked to obtain information with a wide range of stakeholders through the Federal Advisory Committee Act (FACA).

Question 8. In the Agency's correspondence with me, you also reference estimates of the number of wells being drilled each year from States with oil and gas activity and industry representatives. Which States provided input to the Agency? What industry representatives provided input to the Agency? Were the industry estimates validated in any manner before the 2-year exemption was adopted? Was any input sought from industry watchdog or environmental organizations prior to issuing a proposed rule?

Response. We obtained information from Texas and Oklahoma through our Regional Office. We received input from numerous industry representatives, including the Texas Independent Producers and Royalty Association, the Louisiana Independent Oil and Gas Association, the Oklahoma Independent Petroleum Association, and the Independent Petroleum Association of America. Industry representatives, affected States, and EPA Regional staff all agreed that there were large numbers of oil and gas sites potentially affected by our storm water rules. We have an obligation to consider the impact of our regulations on all affected industries. There could be many more sites than even the industry has estimated, but we may find that they are not significantly impacted. The 2-year postponement rule provides EPA with the time to make this determination. Environmental organizations were informed about this situation before the rule was issued.

Question 9. I have attached two reports by the EIA regarding its drilling estimates. Are you aware that the EIA data is not collected by the government, but is instead compiled from industry sources? Are you aware that the EIA itself has identified accuracy problems with its own data used in developing the reports that EPA relied on to support this 2 year exemption for the oil and gas industry? If so, why has the Agency depended so heavily on this data to support its actions in support of the oil and gas industry.

Response. EPA is aware that the EIA is not the primary data collector for oil and gas exploration activity. However, EPA recognizes EIA as the preeminent source of national estimates of drilling activities, having compiled these data for 25 years. EPA considers the EIA data to be the best data currently available, notwithstanding the issues of accuracy and completeness raised by EIA in its review of its own data. EPA does not consider these potential problems to be significant in making its determination to extend the compliance date for oil and gas related construction activity. In fact, many of the corrections listed in the EIA reports actually increase the number of drill sites reported previously, suggesting that EIA's data may actually underestimate the total number of drill sites potentially affected by the 2-year exemption. In addition, as mentioned in the answer to Question 8, additional data from industry were used to supplement EIA estimates.

Question 10. Clean Water Act section 402(l), and the legislative history that accompanies it, is explicit in its application to particular types of discharges from particular types of systems. Clearly, the intent was to exempt uncontaminated flows from conveyances or systems of conveyances already in place that are used for collecting runoff. In the letter that I sent to you with five other members of the Senate on February 20 of this year, we asked a question on this topic that was not answered—what is the difference between uncontaminated flows from conveyances or systems of conveyances and the discharges resulting from a small construction project at an oil and gas site?

Response. CWA section 402(l)(2) exempts from Federal permitting requirements storm water runoff from oil and gas facilities that is composed entirely of flows from conveyances used for collecting and conveying runoff that are not contaminated by contact with raw materials, petroleum products or wastes located at the site. EPA has extended the permit coverage deadline until March 10, 2005, for small construction activity associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities. EPA is currently assessing the applicability of the 402(l)(2) exemption to such activities.

Question 11. Does the EPA's proposed rule on TMDLs comply with EO 12866 requirements regarding the consideration of the benefits and costs to the natural environment of a "significant regulatory action?" If so, please describe the results of your cost-benefit analysis. If not, please explain why EPA has not complied with EO 12866.

Response. EPA's draft proposed watershed rule is under informal review among Federal agencies, CEQ and OMB. EPA will wait until the conclusion of that process to decide whether to go forward with a formal proposal. If EPA does go forward with a proposed rule, we will comply with all the requirements set forth under EO 12866.

Question 12. I understand that the EPA is planning to re-interpret the bypass rule for sewage treatment plants so as to allow sewage to be discharged without aerobic treatment during rain events. How would this change impact the concentration of viruses and parasites, like cryptosporidium and giardia, in wastewater effluent? What analysis did EPA conduct to reach those conclusions?

Response. As EPA has focused greater attention on wet weather issues, regulatory agencies, municipal operators of POTWs, and representatives of environmental advocacy groups have expressed confusion over and requested clarification of the proper interpretation of certain regulatory provisions in the context of wet weather flow management at treatment plants. As part of the Agency's effort to ensure appropriate management of wet weather flows at a POTW, EPA is evaluating the applicability of the bypass provision at 40 CFR 122.41(m) to diversions of a portion of peak wet weather flow at POTWs. We have prepared a draft policy document which was published in the Federal Register on November 7, 2003, requesting public comment. EPA intends its policy would provide a framework that:

(1) ensures appropriate management of wet weather flows at a POTW consistent with generally accepted good engineering practices and criteria for long-term design,

(2) clarifies technology-based requirements,

(3) uses water quality-based effluent limitations to address residual site-specific health and environmental risks, and

(4) provides appropriate safeguards, including a monitoring scheme and protection for sensitive waters.

The draft policy addresses only the limited situations where blended wet weather POTW effluent meets permit limitations. The NPDES regulations require that NPDES permits, including those for blended discharges, must include water quality-based effluent limitations to control all pollutants or pollutant parameters which the Director of the NPDES program determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to a non-attainment of any water quality standard. EPA's 1986 water quality criteria for pathogens provides a relevant tool for establishing water quality-based effluent limitations for infrequent blended discharges. The 1986 criteria serve as an indicator for a wide range of pathogens in wastewater, including viruses and parasites, that can produce acute gastrointestinal disease symptoms. The data supporting the 1986 bacteria water quality criteria were obtained from a series of epidemiological studies that examined the relationship between swimming-associated illness (namely, acute gastrointestinal illness) and the microbiological quality of the waters used by recreational bathers. The wastewater sources affecting the recreational waters evaluated during the studies for the 1986 criteria received a variety of treatment, including no treatment, partial treatment and secondary treatment. Discharges occurring under the draft policy would be within the range of treatment scenarios considered during the epidemiological studies used to develop the 1986 criteria. Hence, we believe the 1986 criteria is a relevant indicator for protecting against gastrointestinal disease associated with potential exposure to ambient waters. However, the 1986 criteria is not a direct measure of *Giardia* or *Cryptosporidium*. The Beaches Environmental Assessment and Coastal Health (BEACH) Act, enacted on October 10, 2000, P.L. No. 106–284 Stat. 870, address pathogens and pathogen indicators in coastal recreation waters. Among other things, the BEACH Act added section 303(i) to the Clean Water Act to require States and Tribes with coastal (and Great Lakes)

recreation waters to adopt new or revised water quality standards by April 10, 2004, for pathogens and pathogen indicators for which EPA has published criteria under section 304(a). The BEACH Act also directs EPA to promulgate standards for States and Tribes that fail to adopt standards for pathogens and pathogen indicators for coastal recreation waters that are as protective of human health as those published by EPA.

Question 13. What requirements has EPA put in place to ensure that there is public participation in trading programs?

Response. Requirements for public notice, comment and opportunity for hearing on all NPDES permits and TMDLs, including those that have provisions for trading, are established by the Clean Water Act and its implementing regulations. In addition to the opportunity for public participation in trading already provided through NPDES permits and TMDLs, EPA's 2003 Water Quality Trading Policy encourages States and tribes to involve the public at the earliest stages of trading program development and to provide easy and timely public access to trading information. As a practical matter, States wishing to develop a trading program will need to do so by incorporating provisions for trading into core water quality management programs such as watershed plans, water quality standards, TMDLs, and NPDES permits. Some States choose to incorporate trading provisions in rulemaking. The mechanism a State uses is a matter of State law and policy. EPA's trading policy does not specify which approach a State must use; rather it provides flexibility for States to develop trading programs while advising consultation with the public on trading program design and ready access to information on trades. As a practical matter, virtually any mechanism a State chooses would require public notice and comment under State and/or Federal law.

Question 14. Your staff referenced some monitoring data that EPA has evaluated from large municipalities and large construction sites regarding the effect of the storm water phase I regulations on water quality. Please provide this information to the committee in response to the question of how has the storm water phase I regulation, covering large municipalities and large construction sites, impacted water quality.

Response. In accordance with section 431(b) of the Department of Veteran Affairs and Housing and Urban Development and Independent Agencies Appropriations Act of 2000, Public Law 106–74 (1999), EPA conducted an evaluation of the Phase I Storm Water Program to provide "a detailed explanation of the impact, if any, that the Phase I program has had in improving water quality in the United States." EPA presented its Report to Congress on the Phase I Storm Water Regulations to the Committee on Environment and Public Works and the Committee on Transportation and Infrastructure on March 1, 2000 (EPA833–R–00–001, February 2000). That report led the Agency to the following findings:

- Although information on the water quality impacts of Phase I is unavailable at the national level, loading reductions and subsequent water quality impacts have been documented at specific sites.
- The fundamental approach for addressing storm water discharges involves the use of site specific pollution prevention and best management practices. These measures can be implemented cost-effectively.
- The flexible nature of the program has encouraged innovation on the part of municipalities, construction operators, and industrial facilities and allowed them to tailor control programs to their own unique circumstances.
- Further improvements can be made in both program design and implementation to enhance effectiveness.

At present, EPA has funded a number of 104(b)(3) cooperative agreements to evaluate storm water Phase I monitoring data to further evaluate the impacts of the program. Funds have been awarded to the University of South Florida, the University of Alabama, and the California State Water Resources Control Board to summarize and evaluate those data. Results of those efforts are expected in FY04 and FY05.

Please note that the responses to the questions regarding EPA's investigative discretion and the Colonial and Olympic Pipeline cases were prepared by EPA's Office of Enforcement and Compliance Assurance.

Question 15. Mr. Chairman, I ask unanimous consent that the EPA's investigative discretion memorandum of January 12, 1994 be included in the hearing record. Mr. Mehan, can you articulate the standard that EPA uses to determine when to criminally prosecute cases? I understand that this memorandum was issued by the Office

of Enforcement. Please coordinate with your counterpart to provide a complete answer to this question.

Response. As the title of the January 12, 1994 memorandum suggests, "The Exercise of Investigative Discretion" ("investigative discretion memorandum"), EPA does not engage in the exercise of prosecutorial discretion. That is the province of prosecutors in the United States Department of Justice, including the Office of the United States Attorney in each Federal judicial district. EPA does, however, exercise its discretion by determining when to criminally investigate cases involving potential violations of Federal environmental laws. This is much the same as is the case with other Federal law enforcement agencies, and is a reflection of, among other things, the fact that enforcement resources are not unlimited and good management dictates prioritizing the Agency's investigatory work.

In order to ensure the investigations undertaken by the Criminal Investigation Division reflect an appropriate use of the Agency's authority, the Office of Criminal Enforcement (the predecessor of the Office of Criminal Enforcement, Forensics and Training) articulated the factors which govern its selection of cases to criminally investigate in the investigative discretion memorandum. That guidance remains the touchstone for case initiation by the Criminal Investigation Division (CID).

At the risk of over-simplifying what is already a rather succinct six page guidance, the CID's investigative discretion policy may be briefly summarized as follows: The criminal case selection process is guided by two general measures—significant environmental harm and culpable conduct. Criminal investigations may be initiated for instances of actual harm—demonstrated by illegal discharge, release, or emission—that has identifiable and significant harmful impact on human health or the environment, or instances where there is a threat of such impact. Criminal investigations may also be warranted when there is culpable conduct, as evidenced by: (1) a history by the offender of violations, (2) deliberate misconduct resulting in a violation, (3) a failure to report a discharge, release, or emission required to be reported, or falsification of records within the Agency's jurisdiction, especially when coupled with actual or threatened environmental harm, (4) tampering with monitoring or control equipment and (5) operation of a business without a required permit or other necessary documentation.

As noted in the policy, this is not to suggest that all cases meeting the case selection criteria will proceed to prosecution. Indeed, the exercise of investigative discretion must be clearly distinguished from the exercise of prosecutorial discretion. The employment of EPA's investigative discretion to dedicate its investigative authority is, however, a critical precursor to the prosecutorial discretion later exercised by the Department of Justice. The Agency continues to operate on the general principle that less flagrant violations with lesser environmental consequences should be addressed through administrative or civil monetary penalties and remedial orders, while the most serious environmental violations ought to be investigated criminally.

Question 16. Can you describe the recent cases that EPA and DOJ successfully prosecuted against Colonial Pipeline and Olympic Pipeline Companies including a description of the environmental damage and the penalties paid?

Response. *U.S.* v. *Colonial Pipeline Company* (D.S.C. 1999).—Colonial Pipeline Company (Colonial) of Atlanta, Georgia, operator of the largest-volume pipeline carrying refined petroleum products in the world, pled guilty to criminal charges in connection with a spill of almost one million gallons of oil into the Reedy River in South Carolina. Colonial was ordered to pay a fine of $7 million and serve a 5-year term of probation.

Colonial is owned by several of the world's largest oil companies. Colonial pled guilty on February 25, 1999, to a misdemeanor charge of violating the Clean Water Act, 33 U.S.C. § 1319(c)(1)(A), when it failed to exercise reasonable care leading to the rupture of its pipeline where it crosses the Reedy River near Simpsonville, South Carolina. Among other things, Colonial: (1) failed to properly train its employees who worked on pipeline, (2) failed to conduct required pipeline tests, or conducted them but disregarded or improperly interpreted the results, and (3) disregarded the advice of its own engineers regarding the appropriate throughput of the pipeline that ruptured.

Colonial acknowledged that its actions led to spill of about 960,000 gallons of diesel fuel, affecting a 23-mile segment of the Reedy River. The spill killed about 35,000 fish and also affected wildlife such as beaver, muskrat and turtles, which died as a result of direct contact with the spilled oil.

During the 5-year term of probation, Colonial must develop and implement an extensive environmental compliance program to prevent and detect further violations of the CWA on the entire pipeline—over 5,500—miles that runs from Houston, Texas, to Linden, New Jersey. The court also required the company to make presen-

tations to national pipeline associations regarding the obligations such pipelines have under the CWA.

On April 1, 2003, in a related matter, EPA and DOJ settled a civil case in significant part concerning the aforementioned Reedy River spill and six others, with Colonial. Under the civil agreement, Colonial will upgrade environmental protection on the pipeline at an estimated cost of at least $30 million, and pay $34 million, the largest civil penalty a company has paid in EPA history. The $34 million civil penalty will go to the United States' Oil Spill Liability Trust Fund, which underwrites nationwide oil spill cleanup activities. The government found Colonial violated the CWA on seven recent occasions by spilling 1.45 millions gallons of oil from its 5,500 mile pipeline in five States and the company's pipeline corrosion, mechanical damage, excavation damage, operator error and other operation and maintenance deficiencies resulted in chronic releases from the pipeline over decades.

The civil settlement required Colonial to designate its entire pipeline as potentially affecting "high consequence areas," subjecting the entire 5,500-mile pipeline to the pipeline integrity regulations of the U.S. Department of Transportation's Office of Pipeline Safety (OPS). Moreover, the settlement requires Colonial to follow enhanced inspection, repair and maintenance procedures beyond those required by Federal regulations, and to pay for an independent monitoring contractor, approved by EPA, to ensure that the company incorporates these requirements into its existing programs.

U.S. v. *Olympic Pipeline Company* (W.D. Wash. 2003)

On June 18, 2003, the Olympic Pipeline Company ("Olympic"), the Equilon Pipeline Company LLC ("Equilon"), former Olympic Manager, Frank Hopf, Jr., Olympic Supervisor of Product Movement, Ronald Dean Brentson, and Olympic Control Operator, Kevin Scott Dyvig were sentenced for criminal violations arising from rupture of the Olympic petroleum pipeline and subsequent gasoline explosion in Bellingham, Washington on June 10, 1999. The rupture resulted in the release of approximately 236,000 gallons of gasoline into nearby Hannah Creek and Whatcom Creek, where the gasoline ignited leading to the deaths three individuals and causing extensive damage to the waters, shorelines and other natural resources.

Specifically, two 10-year-old boys died as a result of the burns they sustained from the fire. An 18-year-old was overcome by fumes, drowned and then burned. The fire resulting from the release of gasoline destroyed all living organisms in over 1½ miles of a salmon spawning stream in a city park. The trees and vegetation surrounding the creek were also destroyed. Over $26 million needed to be spent to address this damage and to remove the gasoline that had soaked into the soils in this area as a result of the spill. There was also damage to the city of Bellingham water supply system and a house was destroyed.

On September 13, 2001, the Federal grand jury in Seattle indicted Olympic, Equilon, Hopf, Jr., Brentson, and Dyvig on misdemeanor negligence charges under the Clean Water Act and various charges under the Federal Hazardous Liquid Pipeline Safety Act.

Olympic pleaded guilty to three criminal counts, specifically: (1) knowingly and willfully violating a regulation under the Hazardous Liquid Pipeline Safety Act, setting forth minimum safety standards for interstate pipelines carrying hazardous liquids relating to training of its operating personnel, a felony; (2) negligently causing the discharge of a harmful quantity of gasoline into a navigable water of the United States in violation of the Clean Water Act; and (3) unlawfully discharging refuse matter into a navigable water and tributary of a navigable water of the United States without a permit, in violation of Rivers and Harbors Act, a misdemeanor.

In accordance with Olympic's plea agreement, the court sentenced Olympic to: (1) a criminal fine of $6 million, (2) an additional civil penalty of $5 million to resolve pending State and Federal civil proceedings, (3) 5 years of corporate probation, and (4) comply with the terms and conditions of a consent decree and an injunctive relief program in the Federal civil enforcement case. The injunctive relief program required that Olympic undertake specific inspection and damage prevention measures on Olympic's 400 miles of petroleum pipeline in Washington State. The United States estimated that this injunctive relief program would require over $15 million in new spending by Olympic, over $5 million of which was not otherwise required by any regulation.

Equilon, through the Shell Pipeline Company LP ("Shell"), Equilon's successor-in-interest, pleaded *nolo contendere* to two criminal counts, specifically: (1) knowingly and willfully violating a regulation under the Hazardous Liquid Pipeline Safety Act, setting forth minimum safety standards for interstate pipelines carrying hazardous liquids relating to training of its operating personnel, a felony and (2) negligently causing the discharge of a harmful quantity of gasoline into a navigable water, a misdemeanor. The nolo, or "no contest," plea has the same effect as a guilty plea

in the criminal case in which it is entered, although it is generally not admissible in subsequent civil litigation.

In accordance with Equilon's plea agreement the court sentenced Equilon to: (1) a criminal fine of $15 million (with up to $5 million of the criminal fine being applied to United States' approved community service projects in the Bellingham area), (2) a civil penalty of $10 million to resolve pending State and Federal civil proceedings, (3) 5 years of corporate probation and (4) comply with the terms and conditions of a consent decree and pipeline integrity/spill mitigation program entered in the Federal civil enforcement case. The pipeline integrity/spill mitigation program required that Shell undertake specific inspection and damage prevention measures on 2100-plus miles of Shell's petroleum products pipelines throughout the United States. The United States estimated that this pipeline integrity/spill mitigation program would mandate over $61 million in new spending by Shell, more than $40 million of which was not otherwise required by any regulation.

Hopf was ordered to serve 6 months in prison, followed by 3 years of supervised release. He also was ordered to pay a fine of $1,000, and to perform 200 hours of community service. Hopf had pleaded guilty to knowingly and willfully violating a regulation under the Hazardous Liquid Pipeline Safety Act, setting forth minimum safety standards for interstate pipelines carrying hazardous liquids relating to training Olympic's operating personnel.

Brentson, was ordered to serve 30 days in prison, 30 days of home detention with electronic monitoring, and 2 years of supervised release. He also was ordered to pay a fine of $1,000, and to perform 150 hours of community service. Brentson had pleaded guilty to the same charge as Hopf.

Dyvig, was placed on probation for 1 year, and ordered to perform 100 hours of community service. Dyvig had pleaded guilty to negligently causing the discharge of a harmful quantity of gasoline into a navigable water.

Question 17. EPA has postponed a rule regarding sanitary sewer overflows that is based on consensus recommendations of a Federal advisory committee. The proposed rule would, among other things, require sewer operators to monitor for sewer overflows and notify public health authorities and the general public of overflows that could make people sick. Beachgoers across the country would benefit from early detection and minimization of overflows and from having the beach closed before the sewage reaches the beach, not after it is already in the water and they are (literally) swimming in it. Although some portions of the rule no longer have the support of the sewer operators, the monitoring, reporting, and public notification provisions are not opposed by any of the stakeholders. Will you commit to moving those provisions separately in a rulemaking so as to provide immediate protection to the American public while the other portions of the rule are debated?

Response. SSOs are covered by the Clean Water Act and are generally prohibited as unpermitted discharges. We are evaluating options for proceeding with improvements to NPDES permit requirements for SSOs and municipal sanitary sewer collection systems. The Agency received extensive comments and suggestions in response to its January 2001 draft proposed regulations. We are reviewing those comments, as well as the data we have collected to prepare a Report to Congress on the impacts and control of CSOs and SSOs, in order to determine the best way to address this environmental issue. We have also met extensively with our stakeholders on this issue. Based on the information collected, we will consider a range of options to address SSOs, including rulemaking. In the meantime, EPA and States are continuing to address SSO problems with compliance assistance and enforcement in accordance with the EPA's April 27, 2000, Compliance and Enforcement Strategy Addressing Combined Sewer Overflows and Sanitary Sewer Overflows.

Question 18. EPA is moving forward a new policy that would allow sewer operators to divert sewage around (bypass) secondary treatment units when it is raining. Will you commit to studying the public health impacts of this proposed policy change before moving it forward?

Response. EPA is evaluating the applicability of the bypass provision at 40 CFR 122.41(m) to diversions of a portion of peak wet weather flow at POTWs. We are requesting public comment on a proposed policy which was published in the Federal Register on November 7, 2003. The framework of the draft policy is described in question 12 of this response. EPA intends that the permit framework described by its policy should ensure that permittees develop information to assess potential water quality impacts associated with blended effluent.

RESPONSES BY TRACY MEHAN TO ADDITIONAL QUESTIONS FROM SENATOR WYDEN

Question 1(a). There are 15 communities in Region 10 that have combined sewers. Knowing that all the communities in Oregon have enforceable orders with the State to control combined sewer overflows (CSOs), why was the city of Portland targeted for investigation?

(b) The U.S. Environmental Protection Agency (EPA) received copies of the agreements entered into between the City and the State of Oregon back in 1991 and again when the agreement was amended in 1994. EPA began looking into Portland's efforts in February 2001, 10 years after the City had first signed an enforceable order with the Oregon Department of Environmental Quality. Why did the agency wait for 10 years to ask questions about the city of Portland's program?

(c) The city of Portland is more than halfway toward meeting its goal of a 96 percent reduction in combined sewer overflow volumes. This is a more stringent reduction level than many communities around the country are committed to achieve, and more stringent than EPA guidance. Why would EPA spend scarce resources to pursue a community already on schedule to go beyond what EPA has approved elsewhere?

(d) The city of Portland has spent over $100,000 in expenses and staff time to respond to your requests for information, visits, tours, and meetings. How much money has EPA spent on staff time, travel and the use of consultants to undertake this two and a half year effort?

(e) The July 7, 2003 letter from Department of Justice claims EPA finds the City to have violated the Clean Water Act because they have had hundreds of CSO events during the past 5 years. How is it possible given that the order signed by the State and the City expressly contemplates CSOs will continue until the abatement program is completed in 2011? Does this mean that the Federal Government does not recognize the CSO abatement orders issued by the State of Oregon?

(f) The July 7, 2003 letter discusses the need for the Federal Government to collect penalties from the City. The Portland community has already spent over $500,000,000 of local ratepayer money since 1991 to attack the CSO problem. They will undoubtedly spend at least that much during the next 8 years to finish the job they have already begun. What purpose would a financial penalty serve? What is the economic benefit the City has enjoyed during the past 10 years when sewer rates have tripled to address the very problems all of us are interested in solving?

(g) In order to evaluate EPA's actions in connection with the city of Portland's Combined Sewer Overflow program, I am requesting the following documents concerning this matter:

- All correspondence, including electronic mail, regarding the Environmental Protection Agency's and your consultants' 2001–2003 inquiry into the city of Portland's Bureau of Environmental Services' operation of its wastewater treatment and collection system; compliance with the Combined Sewer Overflow and Separate Sewer Overflow provisions of the City's National Pollution Discharge Elimination System (NPDES) permits (Columbia Boulevard and Tryon Creek Wastewater Treatment Plants); and compliance with Department of Environmental Quality (DEQ) Amended Stipulation and Final Order, No. WQ–NWR–91–75, dated August 11, 1994 regarding the city of Portland's combined sewer system.
- All notes, summaries, communications, meeting schedules, requests for information and documents regarding Portland's compliance with requirements for combined sewer overflow control.
- All correspondence, guidance, initiatives, memoranda, enforcement initiatives or other materials related to EPA's request of the city of Portland for information regarding operation of wastewater treatment and collection systems and compliance with the Combined Sewer Overflow and Separate Sewer Overflow provisions of NPDES permits, within the past 3 years.
- All correspondence, including electronic mail, guidance, initiative, memoranda, and documents or other materials relating to national, regional or local policies regarding the administration of the Underground Injection Control (UIC) program within the State of Oregon within the past 3 years. Underground Injection Control (UIC) program within the State of Oregon within the past 3 years.

Response. For EPA's responses to the questions from Senator Wyden requesting information and documents on the U.S. Environmental Protection Agency's investigation of the city of Portland's sewer collections system, please see the attached letter, dated October 14, 2003, from Acting Administrator Horinko to Senator Wyden.

U.S. ENVIRONMENTAL PROTECTION AGENCY,
Washington, DC, October 14, 2003.

Hon. RON WYDEN,
U.S. Senate,
Washington, DC.

DEAR SENATOR WYDEN: Thank you for your letters of August 6 and August 28, 2003, requesting information and documents on the United States Environmental Protection Agency's (EPA's) investigation of the City of Portland's sewer collection system. I share your concern on this very important matter, and I remain hopeful that we can work cooperatively with the City and the State to resolve this matter expeditiously.

As noted in your letter, you have asked several questions regarding Federal involvement in this matter. Although we agree that Federal environmental programs are often best administered at the State and local level, EPA retains the authority and responsibility to assure consistent implementation of Federal laws nationally. EPA continues to exercise that authority judiciously.

With regards to the City of Portland, EPA is attempting to address significant environmental problems resulting from continuing and new violations of the Clean Water Act (CWA) and Safe Drinking Water Act. While EPA recognizes that the City has entered into earlier agreements with the State of Oregon, it is important to note that it appears the City of Portland continues to experience illegal CSO discharges, even in areas where construction work on CSO controls has been completed. The City has also experienced many significant sewage releases that are not CSOs and not addressed in the prior state agreements. Finally, EPA is concerned that the City uses over 9,000 underground injection wells as part of its overall storm water management program and that some of those wells may violate the Safe Drinking Water Act. EPA hopes to work with the City of Portland to address any risks posed by the use of these underground injection wells.

In addition to the foregoing, EPA is concerned that the City of Portland may have committed numerous violations of the Clean Water Act and Safe Drinking Water Act that were not addressed by the earlier state settlements. EPA's review of these instances indicates that these violations may include the failure to control the discharge of solid and floatable materials from the CSO outfalls, the uncontrolled overflows of raw sewage from manholes, cracked pipes, and elsewhere in the collection system that have flowed into public streets, private yards, and surface waters, and the placement of storm water injection wells within 500 feet of domestic water supply wells, which poses a potential health threat to those using the wells.

This final point is a key one. The City relies heavily on underground injection wells for storm water control. While many of these 9,000 wells may be found to be an appropriate part of the City's overall storm water management program, they have not been permitted or authorized by any entity as required by the Safe Drinking Water Act, and little information is available as to whether storm water injection in the Portland area is safe and adequately protective of the local aquifer, which is an underground source of drinking water. EPA hopes to work with the City to resolve these issues as quickly as possible.

EPA does recognize that the timing of our investigation is unfortunate, and we acknowledge the City and State's previous commitments to address Portland's sewage problems. We hope that our current investigation will not unduly interfere with the City's ongoing efforts, and we remain committed to working with City and State officials as we progress forward.

Finally, your letters also requested copies of documents concerning EPA's inquiry into the City of Portland's CSO program. We are working with your staff to identify which of the documents that are not enforcement sensitive or confidential would be most helpful to you. As I am sure you can appreciate, it would be inappropriate to release enforcement sensitive and confidential documents at this time, given the ongoing nature of EPA's investigation and settlement negotiations with the City of Portland.

Again, thank you for your letter and support of EPA's enforcement and compliance assurance program. Should you have any further questions or concerns, please contact James McDonald in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-9942.

Sincerely yours,

MARIANNE L. HORINKO,
Acting Administrator.

STATEMENT OF DAVID MABE, ADMINISTRATOR, IDAHO WATER QUALITY PROGRAMS, STATE OF IDAHO, IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

Mr. Chairman and Members of the Committee: My name is David Mabe and I am the Administrator of Water Quality Programs at the Idaho Department of Environmental Quality in Boise, Idaho. I bring greetings to you, Mr. Chairman, from Governor Kempthorne and Director, Steve Allred.

I am testifying to share with you the perspectives of Idaho regarding the challenges that we face implementing the Clean Water Act and the need for regulatory or statutory changes to the program.

STATUS OF OUR PROGRAM

As background for what I am about to present, I would like to give a very brief overview of the status of Idaho's water quality program. We have completed four hundred eighty four TMDLs (Total Maximum Daily Loads) primarily involving sediment, nutrients and temperature; but we have also written TMDLs for metals, oil and grease, and other pollutants.

Next month we will submit to the Environmental Protection Agency ("EPA") a revised 303(d) list done in the integrated report form. It is set up in accordance with the EPA's new guidance regarding a five-part list. The call for data, public comment and review was accomplished electronically. Our 305(b) report was submitted in electronic format.

Our monitoring program is designed to cover the state in a 5-year period using a probabilistic approach. This involves development of a random list of sites, and then refines the areas based on each year's monitoring results until we are focused in the areas having the highest chance of impairment in the fifth year to do more detailed monitoring. Other types of monitoring are done to assess progress in impaired waters, effectiveness of Best Management Practices, or to determine progress of TMDLs in improving water quality.

We are making the Clean Water Act TMDL process work in Idaho, but I believe that there are some fairly simple changes to be made that will lower costs of compliance for all parties involved, make more sense on the ground, and provide better environmental protection.

SUGGESTED CHANGES TO THE LISTING AND DE-LISTING PROCESS

The water quality reporting/listing process under section 303(d) for impaired waters and under 305(b) for all waters needs to occur on a longer schedule. I suggest a 5-year timeframe for mandatory reporting using an integrated reporting format. It is very difficult and expensive to do meaningful reporting with public involvement on a shorter timeframe. Simply put, we do not have the budget to accomplish a "statewide" monitoring program on a timeframe less than 5 years. In addition, many of the improvements in impaired waters will not be apparent in 2 years. To report on a shorter timeframe is not meaningful. For example, using a 2-year reporting schedule Idaho would show very little change in the first two reporting periods (the first four yeas), then the meaningful information we complete in year five would be delayed until the third reporting period (year six) before it becomes public. Valuable staff time and resources are diverted to make two reports in which we have little to say and the public begins to pay less attention to our reporting.

In recent rulemaking and guidance efforts, the EPA has supported a very important concept in differentiating between pollutants and pollution. This allowed creation of a section of the 303(d) list where the waters are not fully supporting the uses, but a TMDL will not fix the problem. Issues like water diversion are identified in the new format, but there is not an expectation that a TMDL will fix an underlying problem that is not water quality based. The new format does allow other agencies, the Idaho Department of Water Resources using the water diversion example, to be put on notice that there is a problem.

SUGGESTED CHANGES TO THE TMDL PROCESS

Another concept that is very important is to allow more flexibility in how pollutant loads are allocated. The current rules envision that loads will be allocated on a daily basis to attain numeric goals. Unfortunately, the real world does not function in this simple fashion. The vast majority of Idaho's TMDLs are to correct problems caused by nutrients or sediments that violate narrative standards. These pollutants are frequently not loaded on a daily basis. Often the majority of the loading occurs in only a few days of runoff over the course of the entire year. A very important concept that has been discussed in recent EPA rulemakings is to allow additional flexibility in pollutant loading and recognize that daily numeric loads will not

work in all cases. A TMDL needs to become a Pollutant Control Plan (PCP) with the flexibility to allow for numeric allocations for those pollutants where this situation fits, or to allow for a problem assessment and identification of specific water quality goals to be achieved when a daily load does not fit. Trying to describe and quantify what needs to happen is desirable, trying to allocate loads daily between sources for some pollutants, is not possible.

Finally, the approval process we go through for our water quality reports, our standards, and our TMDLs desperately needs to be revisited. The Clean Water Act requires that each of these actions be approved by EPA within a 30 or 60 day timeframe. If they do not act, they are subject to legal action. The fact that they must take affirmative action also makes each of these actions subject to consultation. This system creates a tremendous workload for all parties involved. It favors those who wish to litigate, and it creates a situation where different standards may be in place at the state and Federal level simultaneously. I believe the solution is simple, change the requirement for the Federal agencies to affirmatively approve each plan, standard or water quality report to a system where they have discretion to reject items they do not believe meet the goals of the Clean Water Act.

This change will place the burden of defending a work product on the agency that created it. It will limit the number of venues where a challenge can be made. Currently, a challenge that we were overly protective is made in state court against the state, and a challenge that we were under protective is made in Federal court against EPA. This causes both agencies to create separate administrative records to defend the same work product and if NOAA Fisheries or Fish and Wildlife Service are involved there can be as many as four separate administrative records created. This will result in less duplication between agencies and allow each agency to focus on their priorities rather than try to be a generalist defending everything.

SUPPORT FOR POLLUTANT TRADING

Idaho has two watersheds set up to pursue pollutant trading. The first is the Lower Boise River Drainage, the most populous area of our state. The second is in the Mid Snake River, which supports a very large aquaculture industry. In both areas we have designed programs in conjunction with active watershed advisory groups over a multiyear period that should result in dynamic trading for nutrients. In order to begin in the Mid Snake River we need the final NPDES permit language from EPA Region 10 for issuing NPDES permits in the state of Idaho. In the Lower Boise River, the state has just finished the final nutrient allocation for Hells Canyon TMDL, which now must be translated into waste load allocation in the lower Boise Watershed. I have trading partners waiting to begin in both cases. EPA has been an excellent partner in establishing both of these trading areas.

Thank you, Mr. Chairman and Members of the Committee, for this opportunity to comment on this important issue to Idaho and all of the stakeholders participating in Idaho's TMDL process.

RESPONSES OF DAVID MABE TO ADDITIONAL QUESTIONS FROM SENATOR INHOFE

Question 1. Do you believe the current TMDL regulations are clear enough to protect states from unnecessary lawsuits? In not, what are the most important issues a new rule should address to assure a workable, legally defensible program?

Response. The 40 plus legal challenges against EPA and states Nation wide in the last 6 years are evidence that the rules need clarification. I believe the following changes would improve the TMDL program and help focus resources on water quality problems rather than legal and administrative actions.

- Extend listing cycle to 4 or 5 years
- Incorporation of the current 5 part Integrated Report listing process
- Clearly separating 303(d) requirements for TMDLs from 303(e) for implementation plans via the continuing planning process.

Question 2. Identification and listing of impaired waters under Section 303(d) of the Clean Water Act continues to be a source of controversy between EPA and the states, even after the issuance of listing guidance. Can you explain, from a state perspective, the source of the problem and what might be done to resolve it?

Response. The 2002 and 2004 listing guidance has helped overcome some of the problems that plague section 303(d) of the Clean WaterAct. To help minimize future litigation it would be helpful to put the provisions of this guidance into rule. Many of the unanswered questions that remain are really policy level or even philosophical questions about how to interpret the clean water act or a state's water quality standards.

I believe there is still a fair amount of debate about the purpose of section 303(d) of the Clean Water Act. Is it a stream list from which water quality plans are developed, or is it a tool to stop new or modified activities from occurring until it is demonstrated that there will be no impact to water quality. Obviously, the environmental groups and industries view these two potential interpretations very differently. Another example is which type error should be made when making listing decisions. Some parties support a high probability that any impaired water be listed (resulting in many streams being listed that are not impaired), while others are more concerned that the streams on the list be impaired (resulting in some impaired streams not being listed).

Another issue that frequently causes controversy is the interpretation of an individual state water quality standard. Across the United States there is a tremendous variability in climate, vegetation, soils and human activities. This interacts to create different and varying water quality conditions and stream potential. The National Research Council (200) report to Congress describes this. Additionally, there is a great deal of variability in the methods used to assess water quality and describe the beneficial uses that are being protected in the various states. EPA is left in the position of trying to compare and approve each state's impaired waters list and create a record supporting their decision that will stand up to litigation. In reality, the states are really the only one's in a position to make these calls and Federal approval process creates a great deal of controversy.

Question 3. Does Idaho currently, include on its 303(d) list those waters that meet some standards but for which there is inadequate data for other uses? What about those waters that meet all standards but not through best practical technology or secondary treatment? Should these waters be listed?

Response. Idaho uses the new integrated report format so we have a specific category that identifies all waters that do not have adequate data to make a call. This is Part 3 of the report and a schedule should be developed to monitor these waters. I would be opposed to putting them on the 303(d) (part 5 of the integrated report) for 2 reasons. It causes the list to grow substantially and in Idaho we would then be reviewing new or modified activities to assure that they met a no net increase standard. This can be a substantial workload in areas where water quality is really not a problem—lack of information is. The second reason is that delisting a stream is really difficult. It viewed suspiciously by environmental groups and EPA—they almost always oppose it and the amount of data it can take to delist a stream can be substantial.

Using the integrated report also allows us to put streams fully supporting all of the uses that have been evaluated into part 2. This is where most Idaho streams will probably go that are outside of wilderness boundaries because we have not figured our how to determine is a stream is fully supporting the "aesthetics" one of our more subjective beneficial uses. So if we listed all streams for which there was insufficient data for a use—we would probably be forced to list all streams outside wilderness boundaries.

If point sources are not using best available technology and the data indicates that water quality is fine, the stream should not be listed. This is simply a matter where the technology required should be updated in the next NPDES permit cycle (within 5 years) unless other variances or exemptions apply.

STATEMENT OF JULI BETH HOOVER, AICP, CITY OF SOUTH BURLINGTON, VT

I am testifying on behalf of the city of South Burlington, Vermont, where I serve as Director of Planning and Zoning, and also our eight fellow towns who are subject to EPA's Phase II NPDES stormwater regulations. My testimony concerns our experience with the Phase II program, some creative ways we have found to meet the Phase II requirements, and also our expanding, highly successful program of decentralized stormwater management projects that are showing great promise as a cost-effective way to meet local economic and environmental needs.

South Burlington and our fellow towns comprise the urban core of Vermont. We are all located within the Greater Burlington area of Chittenden County, which with its 150,000 residents is home to one-quarter of Vermont's population and most of its major employers. Where water and the economy are concerned, most of what happens in Chittenden County relates to Lake Champlain. The Lake is our drinking water source, a major driver of Northwest Vermont's tourism economy, and a local and national treasure. It is also the endpoint for nine urban streams that drain most of the County's urbanized area, Seven of these are on the State's 303(d) list of waters impaired by urban stormwater runoff. Stormwater is a major environmental concern in Vermont; some of our beaches are plagued by bacterial-related

closings, and we continue to work to reduce phosphorus loading into our beautiful lake.

When we first began learning about the Phase II program, we said "Ugh." More requirements, more paperwork, more expense. Our experience with the program to date, 6 months after receiving authorization under the program, has been much better than anticipated for two principal reasons.

First, the Phase II stormwater management plan development has led to a thorough accounting of just what the towns spend on stormwater to begin with: in other words, what are all of the things we do and expenses we incur because it rains, and because snow melts? The answer is anything spent or done on flood control, catch basin cleaning, culvert replacement, maintaining beaches and streamside recreation areas, or ensuring that commercial sites are properly managed becomes part of each town's Phase II Stormwater Management Plan. In short, the Stormwater Management Plans have become a sort of gap-in-services analysis pointing out what our stormwater actions and budgets really are, what holes there may be, and how to pull together new and particularly existing resources to cover those gaps.

Second, the Chittenden County towns developed a creative and cost-effective way to meet the public education and public outreach minimum control measures. It was apparent early in the Phase II process that the collective public education skill level of our group of engineering, public works, wastewater and planning geeks was absolutely zero. Concerned that we were going to be compelled to spend staff time and funds on ineffective and boring brochures, we did something different. Eight towns, the Burlington Airport and the University of Vermont hired a local marketing firm to develop a professional, highly visible public education campaign to meet the Phase II requirements for all of these permittees. Instead of boring brochures and wasted staff time, we will have a professional public education campaign on how citizens can keep the Lake clean. This approach, which will cost 33 cents per county resident per year, has had an enormous impact in King County, Washington and Prince George's County, Maryland and we believe it will work in Chittenden County, too.

It is South Burlington's direct experience, and my testimony, that given the level of effort, staff time, and resources being spent to meet the GASP–34 accounting standards for fixed-asset inventory, the fractional share of time and resources we are spending to meet the Phase II regulations is a far more useful, cost-effective, and publicly beneficial program. The asset inventory doesn't prevent beach closings and higher water filtration costs; having the authority to implement Phase II will help us do just that.

In Chittenden County, we estimate our communities will spend between $20,000 and $200,000 apiece per year on new expenditures related to Phase II—including the cooperative public education program which—is a per capita expenditure of between $4 and $12 per year. In a recreation-based economy, and in a place where the Champlain Water District will charge us to remove from the Lake whatever pollutants we put into it, we are confident that this is money well spent.

The second, and very exciting, initiative for which I would ask your support, is the our effort to use decentralized or distributed stormwater systems to prevent pollution and support business development. In 2000, a very creative Vermont Environmental Conservation employee noticed three things on a piece of land in South Burlington: a brook polluted with petroleum hydrocarbons, sediment and phosphorus from stormwater runoff in our "auto alley" and which drained, of course, directly to Lake Champlain; a Chevy dealership that needed more stormwater capacity to expand its business; and a totally unused piece of land behind the Chevy dealer that was part of a railroad right-of-way.

With $300,000 from 13 separate grant sources, the cooperation of the Chevy dealer, and a lot of head-scratching by some very talented people, the city of South Burlington built the Bartlett Brook Stormwater Treatment Facility. This four-acre system does three things: It allowed Bill Shearer to expand his business; has now been shown through scientific monitoring to be removing toxic pollutants and nutrients from Bartlett Brook that otherwise would be dumped in the lake; and it made use of a piece of undevelopable land to serve the environment and the economy in an incredibly cost-effective and attractive way.

This approach works. Distributed stormwater treatment systems using constructed wetlands or micropool extended detention, can make use of under-utilized and un-developable land to create capacity for new development and cleanup even the most difficult stormwater runoff pollution problems. They can compliment CSO and other structural treatment systems, or in some cases, substitute for them entirely. Within Chittenden County we have plans on the board for a half-dozen more of these systems, all using land such as highway rights-of-way where no one wants

to build, but where we have tremendous potential to improve water quality and create development capacity where stormwater storage and treatment is an issue.

In Chittenden County, we have planned this type of distributed treatment system in two transportation-related locations here in South Burlington where commercial properties need storage and treatment area, and we can provide that in otherwise useless cloverleafs and on-ramp lands. From a cost standpoint, these systems typically cost between $300,000 and $800,000 to build. When existing public lands, such as railroad or interstate rights-of-way can be used, the cost drops accordingly.

Burlington is proposing a wetland system just upstream of Oakledge Beach, a beautiful beach that is plagued by closures after rain events due to urban runoff from Engelsby Brook. A constructed wetland system similar to Bartlett Brook is proposed just a quarter-mile upstream to remove bacteria, toxics and sediment. The cost is close to $1 million and again, must be funded through multiple grant sources when it should be funded as a matter of good basic water quality infrastructure.

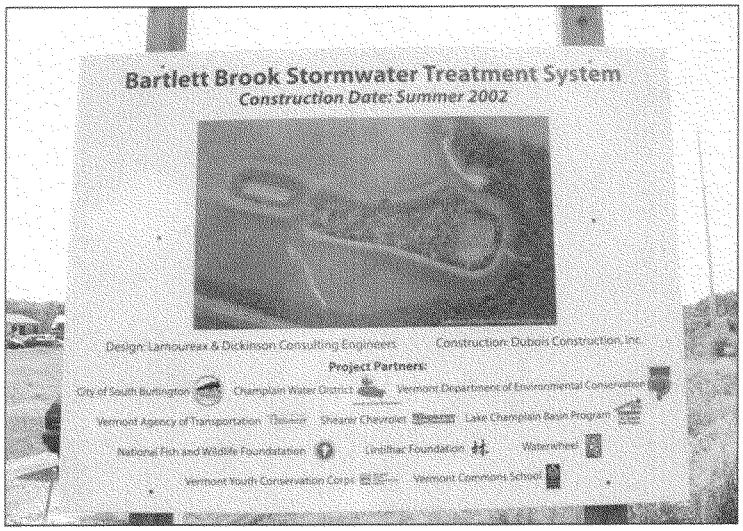
South Burlington is proposing two similar systems to be funded through an EPA STAG grant and the EPA Decentralized Water Resources Demonstration Grant, with costs of $300,000 for one that treats runoff from our downtown in land down below an Interstate on-ramp, and $800,000 for a system treating runoff from state and Federal highways, three shopping centers, and a residential neighborhood just a half-mile upstream of Lake Champlain, and South Burlington's beautiful Red Rocks park and beach.

I would ask Congress's support for this distributed approach through more aggressive funding for and directives to the SRF program to make use of these funds for distributed and non-structural stormwater treatment. Last year, Congress directed the use of $75 million of the over $1 billion in Federal funds for the SRF for distributed, non-traditional and soft path techniques such as these. We would greatly improve public use of funds to spend a larger share of our traditional clean water funds on cheap, effective, distributed stormwater strategies instead of forcing municipal staff to chase down and administer 13 grants for such a valuable approach.

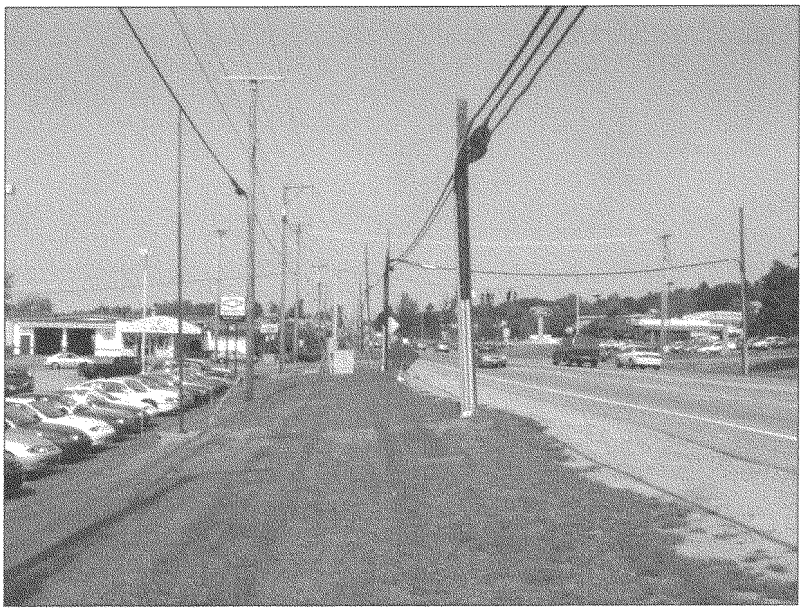
DISTRIBUTED/DECENTRALIZED STORMWATER TREATMENT SYSTEMS FOR URBAN STORMWATER MANAGEMENT IN CHITTENDEN COUNTY, VT

BARTLETT BROOK STORMWATER TREATMENT SYSTEM, CITY OF SOUTH BURLINGTON

The Bartlett Brook Stormwater Treatment System in South Burlington, Vermont is a state-of-the-art constructed wetland system. It illustrates the many advantages of distributed stormwater management, also known as decentralized or "soft path" systems. These utilize land-based treatment of stormwater to clean pollutants from runoff before the runoff enters streams and lakes.



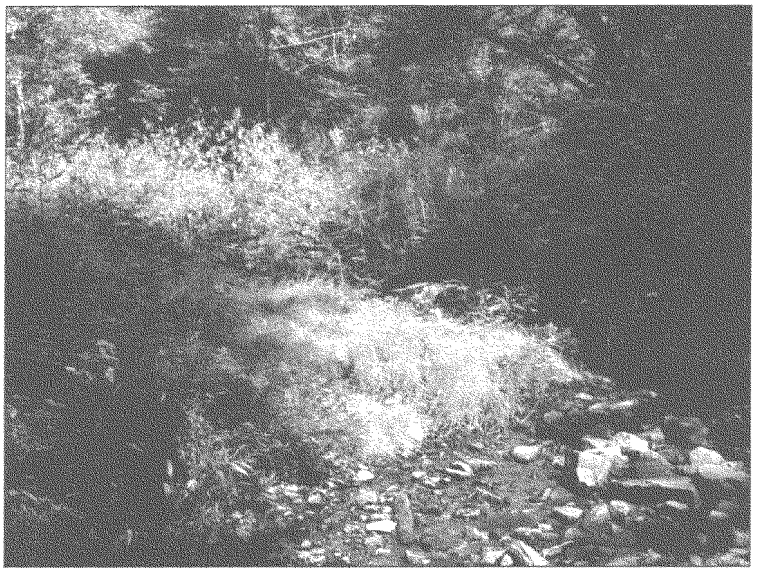
Stormwater runoff from the auto-related businesses on U.S. Route 7 is diverted into a four-acre system of settling ponds and constructed wetlands prior to discharge into Bartlett Brook and Lake Champlain.



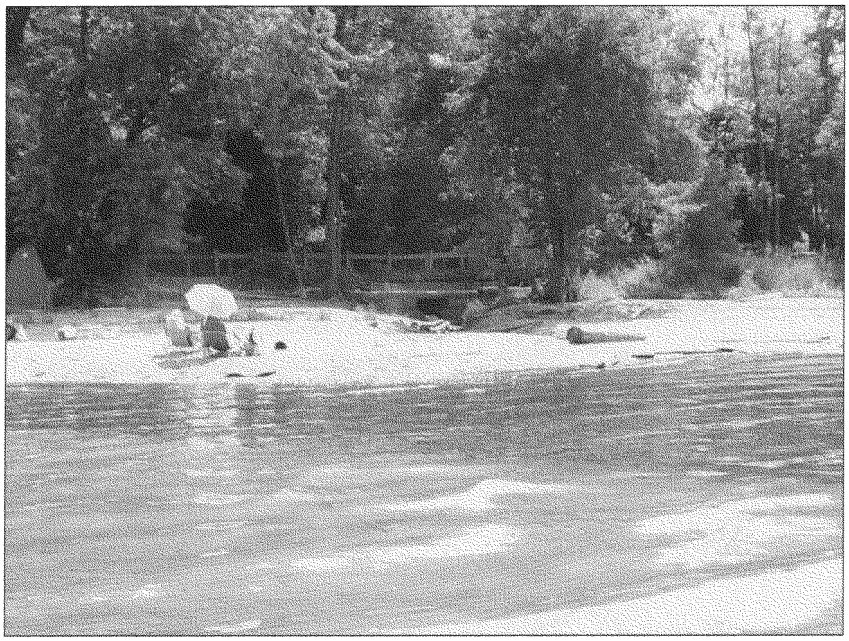
The pond makes use of unused land in a railroad right-of-way, and created enough stormwater capacity to allow expansion of Shearer Chevrolet. Monitoring has shown the system effectively removes petroleum hydrocarbons, sediment, and phosphorus from stormwater. The project cost $300,000 and was funded through 13 grants.

ENGELSBY BROOK CONSTRUCTED WETLAND TREATMENT, CITY OF BURLINGTON

The city of Burlington will build a constructed wetland similar to the Bartlett Brook system on this land along Engelsby Brook, roughly ¼ mile upstream from Oakledge Park and Lake Champlain. This system includes a $60,000 EPA demonstration grant and funding from the EPA Superfund settlement for the Pine Street Barge Canal.



The constructed wetland will remove pollutants upstream of this stormwater outfall, which contributes to beach closures just downstream at the popular Oakledge Park beach.



PLANNED MICROPOOL STORMWATER TREATMENT SYSTEMS, CITY OF BURLINGTON AND CITY OF SOUTH BURLINGTON

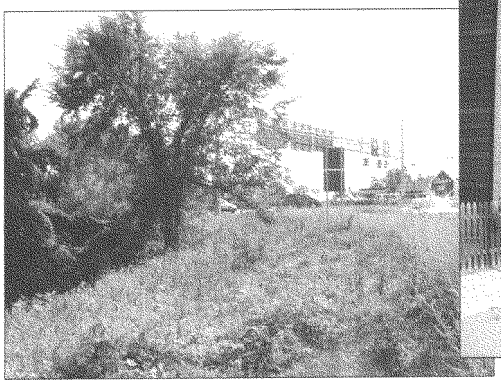
South Burlington will be using the decentralized stormwater treatment approach to treat runoff from its two major commercial centers. Unused, un-developable land

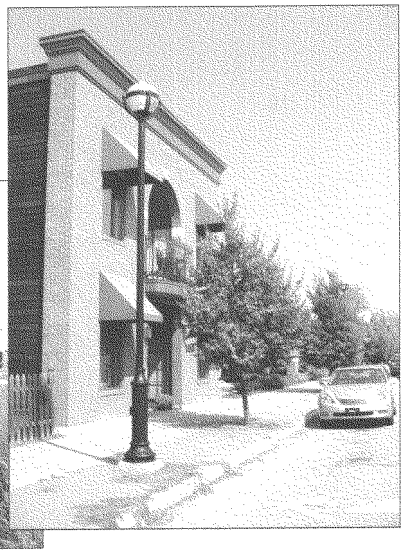
in highway rights-of-way will be used to install micropool extended detention systems.

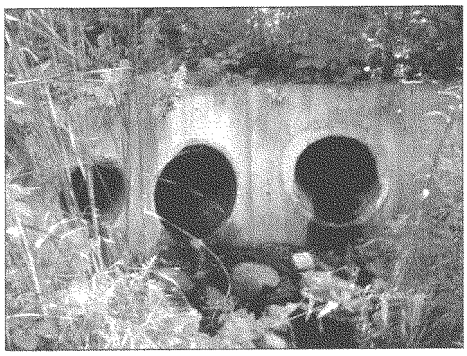
This land along Shelburne Road will treat runoff from and enable redevelopment of three major shopping centers in Burlington and South Burlington.

This interstate on-ramp's right-of-way contains the outfalls for runoff from South Burlington's newly developing City Center area. A micropool system, estimated to

cost $300,000, will provide capacity for development and ensure that pollutants stay out of Centennial Brook and Lake Champlain.







RESPONSES OF JULIE BETH HOOVER TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS

Question 1. Can you comment on the interaction between stormwater management and the amount of water that arrives at a wastewater treatment plant during a wet weather event?

Response. There is no question that the use of decentralized or distributed stormwater treatment and storage systems can help alleviate wet-weather flows to wastewater treatment plants. Infiltrating stormwater into the round, detaining it in basins or storage tanks, or diverting it through land-based treatment systems prior to discharge into a storm drainage system reduces the amount of water that must go through a treatment plant, thereby reducing the potential for overflows. Using distributed systems also reduces the impact of peak flows by detaining stormwater and releasing it over time, rather than flooding the storm drainage system and treatment plant all at once.

In addition to ameliorating the quantity of stormwater arriving at a treatment plant, distributed treatment and storage also improves the quality of the stormwater that must be treated. Techniques that detain stormwater result in heavy particles settling out prior to discharge, keeping these pollutants out of the wastewater treatment plant, and land-based treatment systems also remove volatile organic compounds from stormwater. Treating stormwater through detention or land-based treatment thus reduces the amount of treatment that must occur in a plant, and reduces the pollutant load found in any overflows.

Question 2. In your experience, have structural or non-structural solutions to storm water management problems been the most effective?

Response. Structural and non-structural techniques must be used together to create the most effective stormwater management program. Just as a city needs developed areas and parks to create a healthy community, stormwater infrastructure needs both structural and non-structural or land based components to maximize pollution control and meet water quality goals.

Structural solutions, while very costly, are essential both in fostering urban development and meeting water quality goals. They take very little land area and thus facilitate compact land development patterns. Structural solutions may not, however, be necessary in very low-density areas, or in locations where stormwater treatment can be accomplished through land-based treatment without compromising economic and community development goals. In all cases, non-structural solutions should be an essential complement to structural stormwater treatment. Land based treatment, especially in stormwater pollution "hot spots," is essential for improving groundwater recharge, reducing peak flows, and especially for achieving better pollutant removal.

But without even investing in land-based or structural treatment, non-structural practices can have a substantial, positive impact on water quality. Practices such as making landscaping more "water-friendly," reducing the amount of pesticides, herbicides and other chemicals used, and changing public behaviors on such issues as car washing and pet waste, can further improve water quality without further investment in structural or land-based treatment.

STATEMENT OF MICHAEL SAMOVISKI, CITY OF HAMILTON, OH, OFFICE OF THE CITY MANAGER, DEPARTMENT OF PUBLIC WORKS

Mr. Chairman and Committee members, thank you for granting the City of Hamilton this opportunity to testify before you today.

The City of Hamilton is located in the southwest portion of the State of Ohio and has a population of somewhat more than 60,000 people. Hamilton operates a Publicly Owned Treatment Works, including a Wastewater Treatment Plant and 212.7 miles of sanitary sewer lines. Hamilton also maintains a separate storm water collection system consisting of 180.5 miles of storm sewer and 6,500 catch basins.

In 1999, the US EPA promulgated Phase II Storm Water Rules which require covered political jurisdictions to obtain a National Pollutant Discharge Elimination System—General Storm Water Discharge Permit, which Hamilton received in April 2003. To obtain this Permit, Hamilton was first required to develop a Storm Water Management Plan, which the City submitted to Ohio EPA in March 2003. This Plan encompasses the 6 minimum controls mandated by the Phase II Rules.

Hamilton's City Council is seriously concerned about municipal implementation and enforcement of this recently issued General Storm Water Discharge Permit, especially in light of our very challenging local and state economic climates. As the City prepared its Storm Water Management Plan, it became apparent to City Coun-

cil that the costs associated with its implementation will have to be assumed by our local government, or more likely by our citizens and businesses since surplus municipal moneys for this purpose are non-existent.

To pay for its Phase II Program, the City of Hamilton anticipates having to form and implement a Storm Water Utility. Storm Water Utility charges will be based upon the amount of impervious area on parcels of land. In this manner, each parcel of land within the City of Hamilton would be assigned a fee determined by its runoff characteristics.

According to the Ohio Supreme Court, storm water fees of this sort, since they are utility charges, must be applied in an even and consistent manner without regard to tax status or land use. This means that *all* residents, businesses, schools, churches, governmental and institutional complexes, etc. will have to be subject to these charges, without exception. Each residential unit would have to pay a flat monthly charge; but, non-residential properties would pay a higher amount equivalent to the relative expanse of impervious surfaces at their locations.

The City of Hamilton's projected annual expense attributable to having to comply with the new Phase II Program is an additional $1.6 Million over the current $800,000 that the City now spends on storm water activities. Since Phase II is a federally unfunded mandate, the City of Hamilton expects to have to raise this revenue by imposing a monthly fee of up to $5.50 on residential customers. Non-residential customers would be charged $5.50 multiplied by a factor which takes into account the proportional increase of impervious area.

The following examples help to drive home our point: Hamilton's First Baptist Church, with its associated parking area, was determined to have an impervious factor of 68 times that of a single equivalent residential unit (ERU). As a result, the Church's projected Storm Water Utility charge is calculated to be $374 per month ($5.50 multiplied by 68). Smart Paper Company, a manufacturer of high quality papers, has an impervious factor of 912 ERU's, and its monthly charge would be $5017. Hamilton High School has an impervious area equal to 243 ERU's; its monthly charge would be $1338. The local airport in Hamilton has 584 ERU's associated with its runways and other impervious areas which results in a $3215 monthly charge. Hamilton Scrap Processors, a privately owned recycler, with 88 ERU's would have to pay $484 monthly.

This federally unfunded mandate is being imposed upon local communities at a time when our economies are stagnant, and our Nation is facing huge deficits as forecast by public financial officers. The City of Hamilton is no exception: local budget deficits are already predicted for 2004, and the state's budget is in such distress that no funding for cities and counties is available for Phase II compliance.

Now is not the time for distressed cities, such as the City of Hamilton, to have to impose a new monthly Storm Water Utility charge across the community to achieve Phase II compliance. When the local economy improves, Hamilton's businesses and citizens may be better able to absorb this type of fee. In our current flagging economy, however, our local businesses cannot afford this additional expense. Nor can our citizens who have very recently been called upon to take on more of the municipal financial burden, specifically more of the public safety burden, by paying more in taxes for police and firefighter staffing at the local government level.

Please let me emphasize again that the time for implementation of this Phase II Program is not now. Accordingly, the City of Hamilton respectfully asks that you, as our elected Federal representatives in Washington, commence action before Congress to enact a 5-year moratorium. This moratorium could postpone the unfunded mandate to a time better suited for requiring communities, such as our distressed City, to step forward and implement the Phase II Rules and to impose additional financial burdens on both your and our constituents.

We ask this not because the City of Hamilton is seeking to avoid serving as a good steward of its river and receiving waters, but because we are concerned public officials seeking to strike a reasonable balance between the stark reality of our current depressed local economy and continuing environmental improvement.

Thank you again for your attention and courtesy in allowing us to address this Committee. We were honored to have received your invitation to appear before you to present our concerns.

Storm Water Utility Projected Income Statement
City of Hamilton, Ohio

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Estimated Annual Billing ERUs	37,430	37,430	37,430	37,430	37,430	37,430
Annual Utility Fee ($/ERU/mo)	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50
Program Expenses:						
Regulatory Compliance	$5,000	$100,000	$100,000	$100,000	$100,000	$100,000
Operation & Maintenance-Leaf Collection & Street Sweeping	$595,000	$610,000	$630,000	$650,000	$670,000	$690,000
Operation & Maintenance-Collection System	$150,000	$802,000	$826,000	$851,000	$877,000	$903,000
Planning and Management	.....	$170,000	$170,000	$170,000	$170,000	$170,000
Capital Projects-Engineering Studies	.....	$300,000	$300,000	$300,000	.....	.....
Capital Projects-As Needed System Repair Replacement	$236,000	250,000	$260,000	$270,000	$280,000	$290,000
Capital Projects-Engineering Projects	.....	$305,000	.....	.....	$500,000	$500,000
Total Annual Expenses	$986,000	$2,537,000	$2,286,000	$2,341,000	$2,597,000	$2,653,000
Program Revenues:						
Utility Revenue (From New User Fee)	$206,000	$2,470,000	$2,470,000	$2.470,000	$2,470,000	$2,470,000
Revenues	$206,000	$2,470,000	$2,470,000	$2,470,000	$2,470,000	$2,470,000
Revenue Breakdown:						
Residential	$138,867	$1,665,052	$1,665,052	$1,665,052	$1,665,052	$1,665,052
Commercial	$30,370	$364,148	$364,148	$364,148	$364,148	$364,148
Industrial	$20,344	$243,935	$243,935	$243,935	$243,935	$243,935
Agricultural	$3,910	$46,882	$46,882	$46,882	$46,882	$46,882
Non-Residential Misc	$141	$1,692	$1,692	$1,692	$1,692	$1,692
Non-Residential Public	$12,368	$148,292	$148,292	$148,292	$148,292	$148,292
Total Non Residential	$67,133	$804,948	$804,948	$804,948	$804,948	$804,948
Revenues	$206,000	$2,470,000	$2,470,000	$2,470,000	$2,470,000	$2,470,000

APRIL 25, 2001

RESOLUTION NO. R2001–4–23

A RESOLUTION REQUESTING THE OHIO DEPARTMENT OF DEVELOPMENT TO DESIGNATE THE CITY OF HAMILTON, OHIO, AS "SITUATIONALLY DISTRESSED" UNDER THE GUIDELINES OF THE OHIO MANUFACTURING MACHINERY & EQUIPMENT INVESTMENT TAX CREDIT PROGRAM

WHEREAS, until January 1999, the City had received the "distressed city" designation under the Guidelines of the Ohio Manufacturing Machinery & Equipment Investment Tax Credit Program, thereby allowing for a investment tax credit of 13.5%, as opposed to a 7.5% investment tax credit, on new manufacturing machinery and equipment purchased by local manufacturing companies; and

WHEREAS, following January 1999 and based upon discussions with Ohio Department of Development personnel, the City of Hamilton was upgrade to a "non-distressed" designation based upon the improvement of the unemployment rate within the community, and

WHEREAS, the following, recent events have had, and are likely to continue to have, a serious impact upon employment opportunities within the corporate limits of the City of Hamilton and upon the economic health of the City:

1. Since 1999 several major companies have either downsized, relocated or been sold, and have expressed intentions to leave the City;
2. Ohio Casualty Group recently relocated its corporate headquarters from Hamilton to Fairfield, Ohio, moving approximately 1,000 employees out of the City;

3. Champion International Corporation, formerly the City's largest employer, was sold to International Paper (IP) in June 2000, and:

(a) At the time of the sale, Champion had two facilities in Hamilton, including a paper mill with 800–850 employees and a corporate administrative complex with 550 employees.

(b) IP already owned another paper mill in the City, with approximately 225 employees.

(c) After the sale, IP announced that it would close the administrative complex and relocate some of the existing 550 employees to other IP sites in and out of Ohio, but not in Hamilton, and additionally, IP announced that it was putting the two paper mills it owned in Hamilton up for sale;

(d) In January 2001, a prospective buyer, Smart Papers, LLC, was identified for the former Champion paper mill, and thereafter it has expressed the need to make serious cuts in costs at the mill in order to make it profitable as a stand-alone entity;

(e) While it is uncertain how these cost-cutting measures will affect the overall short- and long-term employment outlook, as an initial move by Smart Papers, the work force was decreased to 550 employees;

(f) By raising the investment tax credit percentage back up to 13.5%, an added incentive may be provided to Smart Papers and other Hamilton manufactures to make additional capital investments in their plants;

(g) The IP Dayton Street Mill is for sale as part of the IP diverstiture of their entire Fine Papers Division;

(h) While the Dayton Street Mill is currently operating profitably, paper production began at this location in 1848 and it is one of the oldest continuously operating paper mills in the Midwest; and

(i) The long-term viability of the Dayton Street Mill and status of the existing 225 employees is uncertain:

4. In March 2001, Mercy Health Partners announced that it was closing its hospital in Hamilton, which will result in the relocation of approximately 635 out of Hamilton to either other Mercy facilities or other employers; and

5. At the end of March 2001, Thyssen Krupp Hoesch Suspensions announced that it was permanently closing its Hamilton spring and suspension parts plant over the next several months, resulting in the loss of another 106 quality manufacturing jobs in Hamilton.

WHEREAS, while the Ohio Manufacturing Machinery & Equipment Investment Tax Credit is not seen as a panacea for development in the City, it does provide an additional, needed incentive to locate within the corporate limits of the City, and

WHEREAS, in total, over the last year and a half, the City of Hamilton has experienced losses in private sector employment of approximately 2,700 jobs, totaling almost 8% of the civilian labor force for the City, as determined by the Ohio Department of Jobs and Family Services.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Hamilton, Ohio;

SECTION I: That based upon the evidence provided and the circumstances that have and are presently occurring within the City of Hamilton, Council does hereby formally request the Ohio Department of Development to designate the City of Hamilton as "situationally distressed" under the Ohio Manufacturing Machinery & Equipment Investment Tax Credit Program.

SECTION II: That Council further requests the aforesaid "situationally distressed" designation take effect immediately or at the soonest time possible and remain in effect until such time as prevalent economic and employment conditions positively change in the City of Hamilton.

SECTION III: That the "situationally distressed" designation for the City of Hamilton, Ohio, will allow any company locating within its corporate limits to be eligible for an investment tax credit of 13.5%, for new manufacturing machinery and equipment.

SECTION IV: This resolution shall take effect and be in full force from and after the earliest period allowed by law.

PASSED: April 25, 2001

Adolf Olivas, Mayor

Effective Date: Immediately

ATTEST: Ina Allen, Acting City Clerk

CERTIFICATE

I, Ina Allen, Acting Clerk of the City of Hamilton, Butler County, Ohio, hereby certify that the foregoing Resolution No. R2001–4–23 was duly published as provided by Section 113.01 of the Codified Ordinances of the City of Hamilton, Ohio, by posting ten days after passage, a copy thereof in each fire station within the city for a period of ten days. POSTED: April 30, 2001

Ina Allen, Acting Clerk
City of Hamilton, Ohio

CERTIFICATE

The undersigned Acting Clerk of Council of Hamilton, Ohio does hereby certify that the foregoing is a true and correct copy of Resolution R2001–4–23 of the City of Hamilton, Ohio, duly adopted at the Regular Meeting on April 25, 2001.

Ina Allen, Acting Clerk
City of Hamilton, Ohio

DEPARTMENT OF ECONOMIC DEVELOPMENT,
Hamilton, OH, May 10, 2001.

JOSEPH C. ROBERTSON, Interim Director,
Ohio Department of Development,
Columbus, OH.

ATTN: Steve Kelley

DEAR JOE: This letter is written as a request for reconsideration of the City of Hamilton's designation relative to the Ohio Manufacturing Machinery & Equipment Investment Tax Credit. Attached is Certified Resolution from the Hamilton City Council formally requesting this consideration.

Up until 1999, the City had received the "distressed city" designation under this program, allowing for the 13.5 percent as opposed to the 7.5 percent tax credit on manufacturing machinery & equipment investments by our local manufacturers. Based upon discussions with Ohio Department of Development personnel at that time, the City of Hamilton was downgraded as "non-distressed" based upon the improvement of our unemployment rate in the community.

Unfortunately, recent events have and are occurring that have and will continue to seriously affect the employment situation and the economic health in the City of Hamilton. Since 1999, several major companies have either downsized, relocated or been sold and expressed intentions to leave the City.

Ohio Casualty Group (OCG) recently relocated its corporate headquarters from Hamilton to Fairfield, moving approximately 1,000 employees out of the City. This relocation was facilitated through an Enterprise Zone Agreement with the City of Fairfield and a Job Creation Tax Credit from the State. (Enterprise Zone Application and Job Creation Tax Credit Program correspondences are attached.) The City attempted to retain OCG through a number of offered incentives, including a sale/leaseback on their Hamilton facilities, but OCG relocated out of Hamilton, despite our efforts.

Champion International Corporation, the City's largest employer, was sold to International Paper (IP) in June 2000. At the time of the sale, Champion had two facilities in Hamilton, including a paper mill with approximately 800 employees and a corporate administrative complex with 550 employees. (WARN Act letter to the City of Hamilton Mayor, dated January 2, 2001, relative to the administrative complex, is attached. Also attached are relocation notices from Butler and Clermont Counties, relative to the relocation of these jobs out of Hamilton. Additionally, various articles are provided outlining the job losses and relocations.) In this case as well, various tax incentives, including enterprise zone and job creation tax credits, have been utilized to assist a company to relocate existing jobs out of Hamilton.

IP already owned another paper mill in the City, with approximately 225 employees. After the sale, IP announced that it would close the administrative complex and relocate some of the existing 550 employees to other IP sites in and out of Ohio, but not in Hamilton. Additionally, IP then announced that it was putting the two paper mills it owned in Hamilton up for sale.

In January 2001, a prospective buyers, Smart Papers, LLC, was identified for the former Champion paper mill. The new buyer has expressed the need to make serious cuts in costs at the mill in order to make it profitable as a stand-alone entity.

How these cost-cutting measures affect overall employment in the short- and long-term is yet to be seen. However, as an initial move by Smart Papers, the work force was decreased to 550 employees. By raising the investment tax credit percentage back up to 13.5 percent, an added incentive may be provided to Smart Papers to make additional capital investments at the plant (Attached are several articles relating the Smart Papers transaction and the employment impact resulting from the sale.)

The other IP paper mill is being sold as part of the sale of the entire Fine Papers Division by IP. While this mill is currently operating profitably, paper production began at this location in 1848 and it is the oldest paper mill in the Midwest. The long-term viability of the mill and status of the existing 225 employees is a question that is unanswered at this time.

On January 4, 2001, the City received another relocation from an existing company, Alba Manufacturing, looking to relocate operations from Hamilton to Fairfield. This relocation notice resulted from an enterprise zone application. This relocation will cost the City of Hamilton an additional 52 quality manufacturing jobs. The relocation waiver was granted and Enterprise Zone Agreement was extended even though the company had an existing Enterprise Zone Agreement in place for their last expansion in Hamilton and their first Agreement with the City had expired only last year. (Enterprise Zone Application with Fairfield is attached.)

In March 2001, Mercy Health Partners announced that it was closing its hospital in Hamilton. This move by Mercy will result in the relocation of another approximately 635 out of Hamilton to either other Mercy facilities or other employers. (WARN Act letter to the City of Hamilton Mayor, dated April 11, 2001, is attached.)

On March 30, 2001, Thyssen Krupp Hoesch Suspensions announced that it was permanently closing its Hamilton spring and suspension parts plant, resulting in the loss of another 106 quality manufacturing jobs in Hamilton. (WARN Act letter to the City of Hamilton Mayor, dated March 30, 2001, is attached.)

In total, over the last year and a half, the City of Hamilton has experienced losses in private sector employment of approximately 2,700 jobs, totaling almost 8 percent of the City's civilian labor force, as determined by the Ohio Department of Job and Family Services. Additionally, City personnel has recently spoken to several other medium-sized employers in the City who are also considering long-term plans that could seriously affect their local employment complement. These other companies combined with the already near devastating effects that the City has felt from Ohio Casualty and IP/Champion, Mercy and the number of other companies would nearly cripple the financial condition of the City for the foreseeable future.

While the Ohio Manufacturing Machinery & Equipment Investment Tax Credit is not seen alone as a development panacea for the City, it does provide an additional incentive to locate within the City.

If you have any questions, comments, or require additional information, please contact me.

Sincerely,

TIMOTHY E. BIGLER,
Director.

OHIO DEPARTMENT OF DEVELOPMENT,
Columbus, OH, June 8, 2001.

Hon. ADOLF OLIVAS, Mayor,
City of Hamilton,
Hamilton, OH.

DEAR MAYOR OLIVAS: I am in receipt and have reviewed the City of Hamilton's petition for designation as a "Situational Distress" Municipal Corporation. Acting under the authority granted to the Director of the Ohio Department of Development in Amended Senate Bill 188, reference Ohio Revised Code 57733.33, A13; I am designating the City of Hamilton in Butler County, as a Situational Distress Municipal Corporation. This designation will be in effect from July 1, 2001 through June 30, 2004.

Effective July 1, 2001 manufacturing or refining companies located within the political boundaries of the City of Hamilton, which make machinery and equipment purchases in compliance with the guidelines as outlined in Ohio Revised Code Sections 5733.33 and 5747.31, are allowed to claim a credit against their Ohio Cor-

porate Franchise Tax equal to 13.5 percent. This is an increase from the base of 7.5 percent, which is available anywhere in the State of Ohio.

Sincerely,

JOSEPH C. ROBERTSON,
Interim Director.

OFFICE OF THE CITY MANAGER,
Hamilton, OH, February 27, 2003.

Hon. GEORGE V. VOINOVICH,
Washington, DC.

Re: Proposed Legislative Moratorium on the Implementation/Enforcement of the NPDES Storm Water Phase II Final Rule

DEAR SENATOR VOINOVICH: The City Council of the City of Hamilton, Ohio (City) is concerned about the implementation and enforcement of the National Pollutant Discharge Elimination System (NPDES) Storm Water Phase II Final Rule (Phase II Rule) in this challenging local, state and federal economic climate. As part of the Clean Water Act (CWA) legislation, the USEPA extended the NPDES permitting program to storm water discharges in 1990. The 1990 regulations established requirements for permitting discharges from industries, construction sites large than 5 acres, and drainage systems in large and medium municipalities serving a population greater than 100,000 (Phase I program). On December 8, 1999, USEPA promulgated the expansion of the existing NPDES Storm Water Program to include discharges from small municipalities with a population less than 100,000. This program, termed the Phase II program, requires covered political jurisdictions to obtain an NPDES storm water discharge permit by March 10, 2003. In Ohio, about 280 cities, counties, villages and townships located in urbanized areas that own and operate municipal separate storm sewer systems (MS4s) are required to obtain this type of permit, which includes the City of Hamilton. To comply with this unfunded government mandate, the City has retained the environmental engineering consulting firm of CDM to assist the City in preparing a Storm Water Management Plan (Plan) that outlines best management practices (BMPs) that the City must implement over the next five years. These BMPs address the six minimum control measures required within the Phase II Rule, and when implemented in concert, are expected to result in significant reductions of pollutants discharging into receiving streams.

We will not dispute that since the passage of the CWA 30 years ago, the quality of our Nation's waters has markedly improved. The City sees daily visual evidence of these remarkable achievements here locally along Hamilton's major watercourse—the Great Miami River—with the continuing presence of large numbers of wildlife, including herons, Canada geese, wood ducks, mallards, swans, beaver, and sea gulls. To maintain and/or improve upon this status however, will come at a certain cost.

As the City has prepared its Phase II Plan, which we fully intend to submit to the Ohio EPA on or before March 10, 2003, it has become noticeably apparent to our City Council that the costs associated with the implementation of this Plan will have to be assessed to our local government, and alternatively and more likely, to our citizens and businesses. This occurring at a time when our economy is stagnant and our nation is facing huge deficits that are being forecast by both local and state financial officers, not to mention federal fiscal authorities. Hamilton is no exception; local budget deficits are already predicated for the next fiscal year, and Ohio's governor has declared the state's budget to be in such crisis that no additional help for local communities will be forthcoming from that sector. Alas, Hamilton, along with 279 other jurisdictions, are being asked to comply with an unfunded government mandate at a time when we can ill afford to be capriciously spending.

To pay for this Phase II program, the City is considering forming and implementing a Storm Water Utility (Utility). The Utility charges will be related to the impervious area factor (i.e., potential runoff following a storm event from a given parcel of land). In this manner, each parcel of land within Hamilton would be assigned a fee based on its runoff characteristics. The state supreme courts have ruled that all parcels must pay the storm water charge if the Utility is to pass the rationale nexus test. No parcel can be exempted due to its tax status or land use—only adjustments to the charge can be applied. This means that to implement a Utility that is fair, equitable and thus legally defensible in a court of law, all residents, businesses, schools, churches, government and institutional complexes, etc. will be subject to these charges. Residents would pay a flat monthly charge, but non-resi-

dential properties would pay a higher amount equivalent to the expanse of impervious surface at their respective locations—some as high as hundreds or thousands of dollars per month.

Now is not the time to impose a new monthly Utility charge upon our community in furtherance of Phase II compliance. When the economy improves, our businesses and citizens will be better able to absorb this type of storm water management fee. In our flagging economy however, businesses cannot afford it; nor can our citizens who are already being called upon to absorb more and more of the financial burden of local and state government.

Please let me emphasize that the time for implementation of this Phase II program is not now. Consequently, the City respectfully asks that you, as our elected federal representatives to Washington, commence whatever action can be promptly placed before Congress to legislatively enact a five-year moratorium to delay the requirement that communities such as ours step forward to implement the Phase II Rule. This will delay the necessity that communities, such as ours, have to impose the financial burden of Phase II compliance on your and our constituents at this time. We ask this not because Hamilton is seeking to avoid our responsibilities as being good stewards of our receiving waters, but as concerned elected officials looking to strike a balance between the best interests of our economy and the environment during tough economic times.

Thank you for looking into this on our behalf. Our City Council, our administrative staff, our consulting engineer and I are all available to talk with you about this should you have any questions.

Sincerely,

MICHAEL J. SAMOVISKI,
City Manager,
City of Hamilton, OH.

OFFICE OF THE CITY MANAGER,
Hamilton, OH., Feburary 27, 2003.

Hon. JOHN BOEHNER,
Hamilton, OH.

Re: Proposed Legislative Moratorium on the Implementation/Enforcement of the NPDES Storm Water Phase II Final Rule

DEAR REPRESENTATIVE BOEHNER: The City Council of the City of Hamilton, Ohio (City) is concerned about the implementation and enforcement of the National Pollutant Discharge Elimination System (NPDES) Storm Water Phase II Final Rule (Phase II Rule) in this challenging local, state and federal economic climate. As part of the Clean Water Act (CWA) legislation, the USEPA extended the NPDES permitting program to storm water discharges in 1990. The 1990 regulations established requirements for permitting discharges from industries, construction sites large than 5 acres, and drainage systems in large and medium municipalities serving a population greater than 100,000 (Phase I program). On December 8, 1999, USEPA promulgated the expansion of the existing NPDES Storm Water Program to include discharges from small municipalities with a population less than 100,000. This program, termed the Phase II program, requires covered political jurisdictions to obtain an NPDES storm water discharge permit by March 10, 2003. In Ohio, about 280 cities, counties, villages and townships located in urbanized areas that own and operate municipal separate storm sewer systems (MS4s) are required to obtain this type of permit, which includes the City of Hamilton. To comply with this unfunded government mandate, the City has retained the environmental engineering consulting firm of CDM to assist the City in preparing a Storm Water Management Plan (Plan) that outlines best management practices (BMPs) that the City must implement over the next five years. These BMPs address the six minimum control measures required within the Phase II Rule, and when implemented in concert, are expected to result in significant reductions of pollutants discharging into receiving streams.

We will not dispute that since the passage of the CWA 30 years ago, the quality of our Nation's waters has markedly improved. The City sees daily visual evidence of these remarkable achievements here locally along Hamilton's major watercourse—the Great Miami River—with the continuing presence of large numbers of wildlife, including herons, Canada geese, wood ducks, mallards, swans, beaver, and sea gulls. To maintain and/or improve upon this status however, will come at a certain cost.

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Thank you for looking into this on our behalf. Our City Council, our administrative staff, our consulting engineer and I are all available to talk with you about this should you have any questions.

Sincerely,

MICHAEL J. SAMOVISKI,
City Manager,
City of Hamilton, OH.

U.S. SENATE,
Washington, DC, July 15, 2003.

MARIANNE LAMONT HORINKO, Acting Administrator,
U.S. Environmental Protection Agency,
Washington, DC.

DEAR ACTING ADMINISTRATOR HORINKO: As the EPA is moving forward with the implementation of National Pollution Discharge Elimination System (NPDES) Phase II permits, I would like to share with you the concerns of many Ohio cities and communities who are uncertain where they will find funding to cover the costs associated with this implementation.

As you are aware, NPDES Storm Water Run-off Permits were designed to help reduce water and soil pollution caused by contaminated run off from streets, roofs, buildings, residences, etc. Over the next five years, the EPA will implement Phase II, which will add smaller metro centers in urbanized areas. These communities have been told to expect little help from the EPA to aid in their compliance efforts.

The State of Ohio originally planned to offer grants to help meet the requirements, however due to budgetary constraints, the State will be unable to assist the cities. Communities say that in order to meet the costs of implementing Phase II, they will have to place additional tax burdens on businesses. Given the state of today's national and state economies, along with the rising costs of doing business, I am concerned over the economic impact this will have in Ohio.

I would like to hear your suggestions on how to ease the financial burden on communities as they begin implementing this mandate. I look forward to hearing your response. If you have any questions, please contact me or my staff assistant Elizabeth Belleville at 202–224–2315.

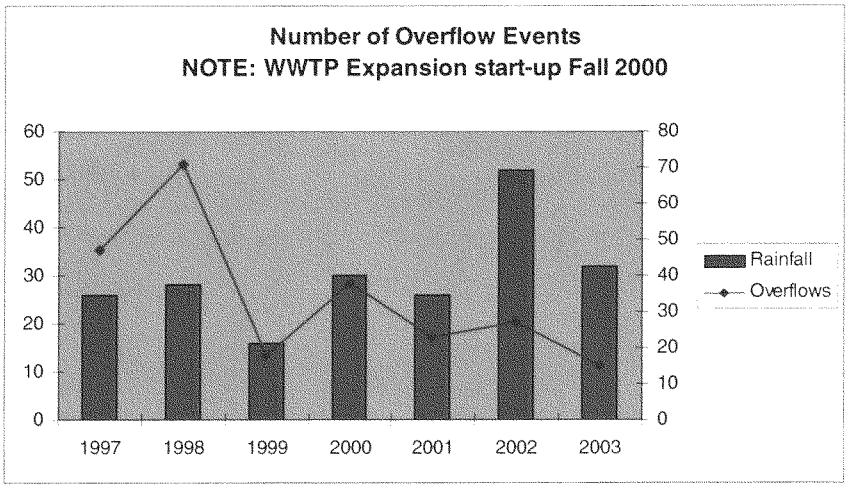
Very respectfully yours,

MIKE DEWINE,
U.S. Senator.

RESPONSES OF MICHAEL J. SAMOVISKI TO ADDITIONAL QUESTIONS FROM SENATOR INHOFE

Question 1. Can you explain what role "blending" plays in the City's ability to manage peak storm events and how EPA's recent internal debate on the practice is affecting the City?

Response. In 1998, the Ohio EPA approved a Permit to Install for the expansion of city of Hamilton's (City) Wastewater Treatment Plant (WWTP). These plans for expansion approved and permitted the use of an alternative wet-weather routing scenario, which includes diverting wet-weather flows into: (1) the WWTP's pre-existing primary treatment system and aeration tanks where it is either stored and drained back into the primary treatment system where it receives full treatment, or (2) blended back into the treatment scheme upstream of the chlorination tank where it bypasses secondary treatment. The second option is used only if the storage capacity of the pre-existing primary treatment system and aeration tanks is reached. By allowing the second option to occur, the City is able to eliminate overly stressing the treatment processes at the WWTP and eliminate surcharging of the interceptor mains conveying flow into the WWTP, which also minimizes the direct discharge of sanitary sewage via sanitary sewer overflows (SSOs) into the receiving stream. The "blending" concept allows the City to maximize primary treatment during wet-weather flows in lieu of no treatment should SSOs occur. Pursuant to the Ohio EPA Permit To Install, the City first put this system in use in the Fall of 2000, and the cost of this expansion has totaled $14.9 Million. The use of this alternative wet-weather flow routing system and occasional blending has reduced the total number of SSOs experienced by the City as shown on the following chart.



Response. Hamilton has begun discussions with Ohio EPA concerning the inclusion of blending in the City's discharge permit. The City is also currently conducting water quality sampling to demonstrate the percent removal of solids achieved through our alternative wet-weather routing scenario. The City's WWTP effluent

consistently meets permitted discharge limits while blending. The additional storage and primary treatment capacity that this alternative wet-weather routing scenario provides the City results in better stream water quality by reducing the volume and occurrence of SSOs while maximizing the conveyance of wet-weather inflow and infiltration through the WWTP.

Question 2. In your testimony, you explain that you will now have to levy a fee to all businesses and residents in your city. Smart Paper will have to pay $5,000 per month. Has the company, one of the few larger employers remaining in Hamilton, expressed concerns about the fee with the city and whether it will impact their ability to continue doing business in Hamilton? Are you concerned about how it will impact your ability to attract other employers?

Response. Smart Papers is very concerned about the monthly fees associated with the proposed Storm Water Management Program. Smart Papers is a production paper mill owned and operated by former Champion International Management and a group of venture capital investors, and as additional fees adversely affect profits, the investors could have no alternative but to close the mill.

Hamilton is considering and researching a number of fair, equitable and lawful options to assist companies, such as Smart Paper, to apply for adjustments and/or credits to their monthly storm water bill. For example, Smart Paper discharges some storm water directly into the Great Miami River through infrastructure owned, operated and maintained by the company and not the city of Hamilton. Based on the amount of upstream drainage area that conveys storm water through this system, the City can potentially offer Smart Paper a storm water credit because the City does not have to incur the expense of performing capital improvements and operation and maintenance activities on this system; however, the company has indicated that any credit less than 100 percent would offer insufficient relief.

The City is very concerned about how these fees may adversely affect new businesses locating into Hamilton. In the competitive atmosphere of the business world every applicable cost, whether it is construction or utility rates, plays a factor as to where the business ultimately decides to locate. Often times, our experience shows that businesses decide upon their final destinations based on very subtle differences in cost.

RESPONSES OF MICHAEL J. SAMOVISKI TO ADDITIONAL QUESTIONS FROM SENATOR VOINOVICH

Question 1. What were the specific challenges the city of Hamilton faced when preparing the Storm Water Management Plan?

Response. The City hired an environmental engineering consulting firm to conduct Phase 1 or Gap Analysis to evaluate Hamilton's existing storm water management programs and identify the deficiencies or gaps that the City would need to address in order to develop an acceptable Storm Water Management Plan. The City then authorized the consultant to conduct Phase 2 of the Program Development, which included the development and preparation of a Storm Water Management Plan and the identification and selection of a funding option(s) to successfully implement the Plan. The funds needed to pay for our consultant came from the General Fund (largely employment taxes), which has suffered greatly from the closing of many of the City's larger commercial and industrial customers. Development of this Plan meant reducing the limited amount of money available for as needed repair and replacement of the storm water collection system. The total cost to the City for the Gap Analysis and Program Development was $310,000.

The development of the Storm Water Management Plan and funding option required active public involvement. Toward this goal, the City formed a Storm Water Advisory Board (SWAB), which included representatives from industry, small business, schools, churches, airport, and private citizens. The City selected a diverse group from a broad cross-section of the community, in order to obtain feedback that would reflect the City as a whole. Hamilton's Storm Water Advisory Board consisted of 5 citizens, 6 industrial representatives, and 4 community groups (hospital, school, metropolitan housing and homebuilders association). A total of 8 meetings were held over an 8 month period of time. Maintaining interest in the process over this timeframe and keeping adequate attendance at meetings was a challenge and a huge educational process.

Another challenge was determining what level of service and which Best Management Practices (BMPs) would satisfy the EPA Phase II National Pollutant Discharge Elimination System (NPDES) mandate. Many questions needed to be answered, and several examples include:

• Would cleaning catch basins every 5 years result in improved water quality or should they be cleaned every 3 years?
• What BMPs should be included in the Storm Water Management Plan?
• Would the citizens of Hamilton be receptive to these BMP's?

Question 2. Briefly describe the costs associated with the implementation of the City's Storm Water Management Plan.

Response. The City has projected an average annual cost for the first 3 years of the Storm Water Management Program to be $2,270,000 with the last 2 years of the program being an average annual cost of $2,470,000. These costs were developed based on the SWAB's Level of Service recommended to Hamilton's Council and are allocated as shown below:

Regulatory Compliance ($100,000)—includes public education, employee training; monitoring and detection of illicit discharges; and program management staff salaries.

Leaf Collection/Street Sweeping ($600,000)

Operation and Maintenance of Collection System ($850,000)—includes the hiring of 4 additional maintenance workers, 1 additional supervisor and establishment of a routine proactive inspection and maintenance program.

Planning and Management ($170,000)—includes funds to complete and update current GIS mapping of stormwater system and outfalls as required by Phase II and engineering, GIS staff salaries.

Engineering Studies ($300,000 for first 3 years)—funds to implement system-wide planning of capital improvement projects to ensure economy of scale and best pollutant reduction.

As Needed Repair and Replacement ($250,000)

Engineering Projects ($500,000 for the last 2 years of the 5-year Plan)—system-wide improvements needed to improve water quality—such as stream bank stabilization.

Question 3. Your testimony explains that the city of Hamilton's projected annual expense attributable to the Storm Water Phase II program is an additional $1.6 Million over the current $800,000 the City currently spends. What storm water activities does the City currently perform?

Response. The City currently has annual expenditures of approximately $600,000 on Leaf Collection/Street Sweeping and $200,000 on Improvement Projects for as needed system repairs and replacement of existing infrastructure. The City currently can only afford to employ 4 full time sewer maintenance workers who are responsible for maintaining 217.7 miles of sanitary sewer, 5600 sanitary manholes, 180.5 miles of storm sewer and approximately 6500 storm water catch basins and inlets.

Question 4. In your testimony, you recommend that Congress should enact a 5-year moratorium on the time or implementation of the Phase II Storm Water program. Other than a moratorium, what other recommendations would you make to Congress to help communities like the city of Hamilton comply with the Phase II program?

Response. Congress could provide startup grants and low interest loans to every city showing a need for assistance in the initial implementation costs—such as planning, mapping and purchasing additional equipment.

Change the implementation period from 5 years to 10 years. USEPA is requiring cities to improve water quality and change the ingrained habits of our citizens in an impossibly short timeframe.

Question 5. Does the State of Ohio have funding available in the form of grants or loans to assist Ohio Communities conduct storm water activities? Has the city of Hamilton applied for funding from the State of Ohio?

Response. The State of Ohio has extremely limited funding available for storm water activities. Furthermore, these sources are not consistent with funding a comprehensive storm water management program nor are they dedicated to storm water only projects. When applying for these funds, the City's storm water projects must compete with sanitary sewer projects, source water protection projects, street maintenance projects, etc.

The City is aware of three grant and loan programs from the State of Ohio. None of these opportunities are specific for storm water management and do not provide the significant source of funding the City would need to reduce the burden on the citizens and businesses in Hamilton.

Question 6. Other than resources, what other specific challenges does the city of Hamilton face affecting the City's ability to implement the Phase II Storm Water program requirements?

Response. The City is required to locate and identify every storm water system outfall. It will also be necessary to map every pipe, catch basin, and curb inlet in our system in order to track illicit discharges. The City's stormwater infrastructure is over 100 years old, and complete maps do not exist for some of the older sections. Mapping these sections will require utilizing technicians currently working on other equally important and time sensitive projects to field check and/or verify locations, depth and size of storm sewer lines and appurtenances.

The City is concerned with the state of apathy the population in general has toward storm water management. To be successful, the Storm Water Management Plan is relying on a vast public education effort and participation by the citizens to control storm water pollution.

Question 7. Briefly describe any wastewater or drinking water infrastructure issues affecting the city of Hamilton resulting from a Federal mandate.

Response. Sanitary Sewer Overflow—0 discharge prohibition.—The City has spent $ 25.85 Million since 1994. Preproposal of SSO regulations published in 1999 indicates USEPA is considering defining basement back ups as sanitary sewer overflows. If enacted, this determination would create a tremendous administrative as well as financial burden on the City since based on the proposal, Hamilton would be required to determine that the back up was not related to any collection system flow restrictions.

Proposed TMDL.—The City is being required to collect additional data (re: phosphorous, Nitrate plus Nitrite, Total Dissolved Residue) unrelated to our wastewater operation. OEPA is requiring Hamilton to collect this data on a monthly basis for assistance in their efforts to develop a TMDL for the lower Great Miami River in 2013. This OEPA requirement to collect and analyze these samples has created an additional burden on our already limited lab staff.

Blending.—The City is very concerned about the proposed guidance on Blending being negotiated with the various USEPA regions. As per the Ohio EPA's Permit To Install, Hamilton invested $14.9 Million in 1999 on an approved alternative wet-weather flow routing system that was designed and constructed to blend effluent flows during excessive wet weather flow situations.

Consumer Confidence Reports

Water Plant Security Initiative which was totally funded by grants from the US EPA

Wellhead (Source Water) Protection—City of Hamilton spends approximately $150,000 annually

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STATEMENT OF STEVE KOUPLEN, PRESIDENT, OKLAHOMA FARM BUREAU, AMERICAN FARM BUREAU FEDERATION

Mr. Chairman and members of the subcommittee, my name is Steve Kouplen. I am president of the Oklahoma Farm Bureau Federation. I am pleased to be here today to offer testimony on several water issues of importance to agriculture across the country.

On July 13, 2000, EPA published final regulatory requirements for establishing Total Maximum Daily Loads (TMDLs) under the Clean Water Act (CWA). Farm Bureau strongly opposed those regulations and promptly petitioned the court and asserted that many of EPA's revisions were unlawful under the Administrative Procedure Act or exceeded the agency's authority under the CWA. One of the most disturbing aspects of the July 2000 rule was the agency's conversion of the TMDL program into an overarching, nationwide enforcement mechanism for all sources of pollution—point and nonpoint sources. We believe that the TMDL program should respect the practical and legal differences between point and nonpoint sources. As the CWA has recognized for over 30 years, the availability of end-of-pipe technologies for point sources has made a precise control strategy feasible. Nonpoint sources, on the other hand, cannot rely on any comparable technologies and must therefore use less precise, more subjective "best management practices" to achieve load reductions. Given the inherently less predictable results of the measures available to nonpoint sources, a command-and-control strategy for nonpoint sources has never been feasible. Until the July 2000 rulemaking, the agency had never formally embraced this approach to nonpoint sources.

We opposed the 2000 regulations in large part because they required an implementation plan as part of a TMDL. Section 303(d) provides no authority for the

preparation or establishment of an implementation plan. It merely envisioned the translation of waste load allocations into water quality-based effluent limitations for point sources. Since this was the intended purpose of Section 303(d), there was no need for a formal implementation mechanism.

But even assuming Section 303(d) required the preparation of implementation plans, there is no authority for the July 2000 rule to require the plans to include "reasonable assurances" that load allocations be achieved. Indeed, the words "reasonable assurances" do not exist in Section 303(d).

Further, Congress went to great lengths to ensure that EPA did not prescribe in local land use decisions by delegating nonpoint source control to the states in Sections 208 and 319. The 2000 rules undercut this approach, allowing EPA to prepare implementation plans that dictate how and when nonpoint sources can use their land. Implementation of a nonpoint source TMDL is clearly an inappropriate area for Federal management. States should have the freedom to implement their TMDL programs at their discretion.

Farm Bureau believes a TMDL is information about the assimilative capacity of an impaired water body. Once EPA approves a TMDL that information should be used by the state in their Continuing Planning Process (CPP), established under Section 303(e), for state implementation of Waste Load Allocations (WLAs) and Load Allocations (LAs). The CPP allows for an integrated watershed approach that brings together and integrates the distinctive approaches contained within the CWA for point and nonpoint sources. Specifically, point sources would be subject to water quality-based effluent limitations that could be incorporated into National Pollutant Discharge Elimination System (NPDES) permits, over which EPA would exercise discretionary review and veto authority. Nonpoint sources would be subject to state-developed best management practices, over which EPA would exercise the power of review and grant funds. The integrated watershed approach, conducted under the umbrella of the CPP, allows states and local watersheds to——

1. Monitor and assess their needs;
2. Plan their economic development, implement water quality management measures and even institute trading policies;
3. Achieve the goals and objectives of the watershed in a manner consistent with the goals of the CWA; and
4. Diffuse and minimize the potential for adverse litigation that will frustrate a cooperative and locally led watershed approach.

The CWA requires that states identify waters impaired by pollutants and establish Total Maximum Daily Loads (TMDLs) at levels necessary to implement applicable water quality standards. Pursuant to CWA § 303(d)(2), EPA must approve or disapprove all such TMDLs and must directly establish TMDLs in the event of disapproval. EPA has consistently recognized that "the decision on how to identify the most cost-effective or equitable means of allocating loadings is best handled by the state." E.g., 65 Fed. Reg. 43,586, 43,620 (July 13, 2000) (preamble discussion of July 2000 final TMDL rule, also commenting that states can use "any kind of system or policy for allocating pollutant loadings among sources, as long as the resulting allocations will lead to attainment and maintenance of water quality standards"). Such subjective judgments concerning equity and cost-effectiveness—like other aspects of water quality planning—are specifically committed to the states' discretion under the CWA, subject to EPA guidance and support. Finally it is our understanding that the draft watershed rule states that "EPA is proposing that load allocations for these sources may be expressed as allocations to specific sources or as gross allocations without connection to categories or subcategories or sources." We are concerned about the use of individual load allocations that would be subject to EPA approval. A gross allocation would provide the states and the stakeholders the flexibility they need to develop reasonable limits for both point and nonpoint sources.

In the *Pronsolino* v. *Nastri* 291 F. 3d 1123 (9th Cir. 2003) decision the U.S. Court of Appeals for the Ninth Circuit said, "[t]he upshot of this intricate scheme is that the CWA leaves to the states the responsibility of developing plans to achieve water quality standards if the statutorily mandated point source controls will not alone suffice, while providing Federal funding to aid in the implementation of the state plans." Consistent with the primary responsibilities and rights of the states, EPA approves state nonpoint source management plans as a condition of establishing eligibility for CWA funding. See CWA § 319. Even in the event of "disapproval," EPA lacks CWA authority to dictate state decisionmaking by directly establishing such plans. In contrast, TMDLs—like water quality standards themselves—may be directly established by EPA if states fail to do so in accordance with CWA requirements. See CWA §§ 303(c)(3)-(4), 303 (d)(2). This ensures that TMDLs will be available as "informational tools that allow the states to proceed from the identification of waters requiring additional planning to the required plans."

This fundamental balance of state-Federal control requires that EPA ensure that the ultimate goal (the "total" load) is properly defined, but that states alone determine how the goal will be achieved. Thus, states—not EPA—must determine how loading capacity will be "allocated" among the various industrial, municipal, commercial, residential, agricultural, silvicultural, and other pollutant sources. Such highly subjective decisions necessarily require balancing the needs of competing land uses based on considerations of equity, economy, and public welfare. As such, allocation decisions are the essence of implementation planning that has been strictly reserved for the states.

Implementation programs will be effective only if states revise allocations based on experience—i.e., demonstrated successes or failures of existing programs and control measures. TMDL implementation for nonpoint sources in particular must be a process where state strategies evolve to expand programs that work and change or abandon programs that fail. TMDLs will unnecessarily constrain, rather than foster, state efforts to achieve water quality standards if allocations to particular sources or source categories are "locked in" absent submission and EPA approval of a revised TMDL.

Stakeholder participation and innovation—including nutrient trading and other market-based approaches—will be stifled if pollutant allocations are fixed. Where achievement of the "total" pollutant load is the clear objective, states and stakeholders have the incentive and the flexibility to achieve that goal in the most efficient and cost-effective manner. Yet much of the incentive for such collaborative efforts will disappear if the results are subject to disapproval at the Federal level.

Trading Policy.—Trading policy empowers states and tribes to implement market-based programs to achieve and go beyond the goals of the CWA. Both point and nonpoint sources need new tools that move beyond the existing regulatory framework. Our Nation must participate in a highly competitive world market and our policy should reflect the demands and efficiencies of market-based program. Trading will allow the water program to go beyond the technological and economic limitations of our existing regulatory framework to find solutions to complex water quality problems. Trading is an innovative strategy that can align with other core conservation and water programs.

Oil Spill Final Rule Impact on Agriculture.—EPA's July 17, 2002, Oil Spill Prevention, Control and Countermeasures (SPCC) Rule will negatively impact farmers and ranchers, and their cooperatives across the country. While the subsequent January 9, 2003, rule providing an 18-month delay in its implementation allows more time to prepare; it does not reduce its overall cost or impact. The oil spill rule and program will greatly affect agriculture.

The rule fails to take into account the nature of production agriculture, and appears to be based on limited data or information that is out of date. It also does not take into account the cumulative effect of EPA's rules and regulations on agriculture.

Farmers and ranchers need to store fuel on their farms in order to control costs and to fulfill time sensitive production operations. Many farms, especially in the western states, require more than the regulatory threshold of 1,320 gallons of fuel storage for their operations. On many larger farms the fuel storage is not centrally located. Above ground tanks are placed where needed for efficient equipment operation and these may be miles apart.

In a letter to EPA on June 2, 2003, several agricultural organizations and cooperatives stressed that the SPCC rule for agriculture:

(1) underestimated the economic impact by:

a. using 1991 cost data for a 2002 rule

b. using examples of costs based on farms in the upper 9 percent income bracket

c. basing impact on inadequate survey data

d. drawing conclusions about tankage based on income and not tank survey data

e. exempting 27,700 farms out of 2 million

(2) showed a lack of understanding of ag operations by:

a. mentioning farms only six times in the 112-page rule and only in the preamble

b. not understanding farm layouts and oil storage operations

(3) inappropriately applied bulk terminal rules to private family property and/or small businesses.

Given the dispersed nature of farm fuel storage and the costs associated with following the rule requirements for containment, integrity testing, security and plan development, we believe that the threshold should not apply to family farms nor to

those storages where a spill would have no impact on water quality. We believe that based on the 1971 and 1993 Memorandums of Understanding between DOT and EPA, that SPCC rules should have been intended for commercial wholesale and retail sales and not the private party small end user. In addition, the aggregation of many smaller tanks, often in dispersed locations across farms and farmland, must also be addressed so as not to place farms in a costly regulatory program where there is no threat to water quality.

Farm Bureau has been a strong supporter of the voluntary, incentive-based approach to working with farmers and ranchers to improve and protect our environment. EPA should first look to the USDA for appropriate conservation practices and technical support to address this issue with agriculture. We support using our U.S. Department of Agriculture conservation programs, such as the Environmental Quality Incentives Program and the Conservation Security Program to help agriculture address the above-ground fuel tank issue.

The concerns about the impacts of the oil spill rule warrant a complete review of the final rule as it impacts agriculture. EPA should address agricultural oil storage differences in a manner that allows the farm and ranch community to protect water quality in an economically and environmentally sound and effective manner.

Thank you for accepting our testimony.

STATEMENT OF MICHAEL R. LOZEAU, ESQ., EARTHJUSTICE

INTRODUCTION

Good morning Chairman Crapo, Ranking Member Graham and members of the subcommittee. My name is Michael Lozeau. I am an attorney with Earthjustice, a non profit environmental law firm with offices located throughout the country. I am employed at the Earthjustice Environmental Law Clinic at Stanford, a joint project between Earthjustice and Stanford Law School that provides students with a real world experience in environmental litigation and advocacy before administrative agencies on behalf of non-profit environmental advocacy organizations. I also am a Lecturer at Stanford Law School. It is an honor to have the opportunity to share with you today some of my and Earthjustice's concerns regarding several recent actions by the Environmental Protection Agency that have or will undermine the implementation of the Clean Water Act and allow substantially more pollution to enter our Nation's waters and prevent the clean-up of the vast number of waters, estimated at about 45 percent of all of the country's rivers, lakes, streams, and coastal waters, that are too polluted for fishing, swimming and the myriad other uses made of those waters by the American public.

The Clean Water Act was enacted in 1972 because the water quality laws that came before it did not work. Those laws were limited in scope, often based on voluntary programs, and sought to enforce the few available ambient water quality standards directly without pollution control permits or clear requirements applicable to individual sources of pollution. Those laws did not work. As recognized by many Members of Congress thirty years ago, our Nation's waters were treated as little more than open sewers for industrial and municipal wastes.

In 1972, the Congress solved this problem by enacting the Clean Water Act—creating a comprehensive legislative program that, as written, addresses almost every water pollution problem facing the country. In particular, the Act's National Pollutant Discharge Elimination System ("NPDES") permitting program, where applied, has been heralded as a great success in reducing pollution from sewage plants and many industrial dischargers. In the last decade, this Clean Water Act program has begun to have similar positive impacts on reducing storm water pollution from municipal storm systems, many industrial storm water pollution sources and construction sites.

Juxtaposed with the success of the Act's permitting program is the notable absence of progress for pollution sources that have not been brought into the NPDES program. Many of these include point source discharges that EPA has simply failed to address or affirmatively attempted to exempt from the NPDES program. Examples include point source discharges associated with the logging industry. Likewise, discharges exempted from the NPDES program created by Congress also have grown worse over the years, despite Congress' provision of funds and voluntary programs. The widespread toxicity of the rivers flowing into San Francisco Bay in California's Central Valley by pesticides, nutrients and other farming-related pollution is a depressing testament to the ineffectiveness of Clean Water Act programs, outside of the standard setting and NPDES program, to clean up pollution.

One very important reason no discernable progress has been made to reduce pollution outside of the NPDES program is EPA's historic failure to implement a common sense and core requirement established by Congress in 1972—the Total Maximum Daily Load ("TMDL") program. Over the last 5 years, both EPA and the States have gone through, and are continuing to go through, a steep learning curve, starting a program essentially from scratch after 25 years of neglect. During those 25 years, rather than heading off well-documented water quality problems, numerous pollution problems in our rivers and lakes that were left unregulated by the permitting program have in many cases steadily increased or become more intractable. The current efforts need to be given time to determine their effectiveness at cleaning up pollution. Implementation of the current TMDL rules should be given a chance to work before they're abruptly changed.

Instead of aggressively implementing the TMDL program, closing existing loopholes, and faithfully implementing and enforcing the statute, this administration has instead taken a series of action to weaken the tools available to protect our Nation's waters. While I will not cover most of these today, the administration's actions in many ways are attacking Clean Water Act safeguards that most people would assume are firmly protected by law. For example, the administration repealed a 25-year old regulation to authorize waste dumps in waters of the United States; eliminated Clean Water Act protections for as many as 20 million acres of wetlands; allowed factory farms to write their own pollution control standards; and withdrew a regulatory proposal to control sewer overflows and notify the public of overflows that could make them sick.

Pending policy decisions are potentially even more damaging, including the decision on whether to eliminate Federal jurisdiction over more than 60 percent of the stream miles and millions more acres of wetlands and ponds that are currently protected by the Clean Water Act. These rollbacks often involve this administration doling out favors to various industries to exempt them from other Clean Water Act requirements instead of protecting the public interest. This includes the oil industry, which has been given exceptions from storm water regulations that apply to almost every other industrial activity in the country and with which EPA is now engaged in private back room discussions regarding the Act's application to preventing oil spills into tributaries and other waters.

Earthjustice encourages the Committee to dissuade EPA from reversing thirty years of efforts undertaken by this country to implement the Clean Water Act and restore and preserve the integrity of the Nation's waters. The American public feels very strongly about the health of their rivers, streams, lakes and shorelines. Neither a weak TMDL program nor questionable legal positions that simply invite litigation will cleanup or protect the Nation's waters; nor will these policies provide any certainty to businesses that must comply with clean water laws. If the agency's administrators continue down these and other paths aimed at weakening the Clean Water Act and its implementation, they ultimately will not be able to convince the American public that EPA is serving the public's rather than corporate interests.

WERE EPA TO PROMULGATE ITS DRAFT TMDL RULE THE RESULTS WOULD BE DEVASTATING TO CLEAN-UP EFFORTS AROUND THE COUNTRY AND UNDERMINE CONGRESS' CLEAN WATER ACT MANDATES

Of particular concern is the Bush Administration's draft plan to drastically amend the regulations that currently guide the development of water quality protection plans known as Total Maximum Daily Loads so-called TMDLs. For the last 18 months, the EPA has been working on a proposal to rewrite the rules that implement the TMDL program—rules that were put in place by the Reagan and previous Bush Administrations. A draft of their rewrite of the rules was made available to the public earlier this year. The draft is currently being considered by the Office of Management and Budget under "informal" review.

This proposal, if promulgated by the administration, would significantly weaken—if not completely derail—one of the Clean Water Act's most important programs.

When enacted in 1972, the Clean Water Act required municipal and industrial dischargers to comply with two levels of pollution control treatment technology back in the late 1970's and 1980's. Industry was required to comply with "best practicable treatment technology" (BPT) by July 1, 1977. Cities were required to apply secondary treatment to their sewage by that same date. Congress recognized from the start that in many cases, those initial technology requirements were not going to be sufficient to implement water quality standards in many waterbodies throughout the country. Water quality standards are set by the States and specify how clean a waterbody needs to be in order to be usable, for example, for swimming, aquatic habitat, or as a drinking water source. So Congress created the TMDL requirement

to supplement the BPT and secondary requirements. In short, this section of the law—Section 303(d)—requires States to identify all waters where BPT and/or secondary treatment—the lowest pollution control technology requirements—are not by themselves sufficient to implement water quality standards. For each of those identified waters, the States, and if they fail to do so, EPA, must prepare a TMDL.

A TMDL is just what it says, a total, maximum, daily load of a given pollutant that assures implementation of all water quality standards applicable to that pollutant. The current regulations define a TMDL as "the sum of the individual WLAs [waste load allocations] for point sources and LAs [load allocations] for nonpoint sources and natural background." 40 C.F.R. § 130.2(i). Together, the waste load and load allocations add up to a water body's "loading capacity" which is defined as "[t]he greatest amount of loading that a water can receive without violating water quality standards." 40 C.F.R. § 130.2(e). That safe level of pollutant loading, assuming there is any safe level, is then allocated to each of the sources discharging that pollutant and, using the NPDES permitting program and other pollution control tools established by the Act or State laws, those allocations are implemented in order to assure attainment of the TMDL.

In 1972, Congress envisioned TMDLs as an integral component of the Act's comprehensive regulatory scheme, applied early on in the Act's lifespan to any waters that were not fully protected or would not be fully protected by the application of BPT and/or secondary treatment. Wherever BPT and/or secondary treatment, by themselves, could not assure the implementation of all water quality standards, a waterbody had to be listed and a TMDL prepared and implemented.

That is still the law today. Historically, however, instead of implementing Congress' clear and logical vision for ensuring all waters were safe for fishing, swimming and other uses, EPA has served as a barrier to implementing the TMDL program. EPA wrote and finalized regulations for the program in 1985 and amended them in 1992, but for over two decades EPA and the States literally did nothing to make the program work as a tool to reduce water pollution, instead, letting it languish on the books. During that time, waters that would have been protected or cleaned up at much less expense by an early application of the TMDL program were instead allowed to get dirtier and dirtier.

The 1992 EPA regulations were an attempt to get the TMDL program on track. Although flawed, and only after encouragement by numerous citizen enforcement efforts and provision of additional funding from Congress and individual States, EPA has finally begun to make progress implementing those 1992 regulations. The number of TMDLs approved or established annually has steadily increased in the last 4 years, jumping from 500 in 1999 to nearly 3,000 in 2002. In 2001 and 2002 combined, more than 5,000 TMDLs were approved or established under the current TMDL rule. Granted, the quality of those TMDLs may vary substantially at this point. But they're in place and, with improvements that can be made under existing legal authority, these TMDLs should over time provide an effective framework to address both polluted waters and waters threatened by pollution, achieving the rational and comprehensive pollution control program that Congress envisioned to clean up dirty waters and protect our rivers, lakes, and shorelines for generations to come. Progress is certainly being made. However, much work remains to be done.

The adverse effects of EPA's years of neglect of this critical component of the Clean Water Act are still being felt throughout the country. Lists of impaired waters continue to expand—irrefutable testimony of the need for EPA and the States to aggressively implement the TMDL program. For example, California started with a list of 18 impaired waters in 1978–79. That list has steadily grown to 28 waters by 1986, 77 waters in 1988, 245 impaired waters by 1991, 276 in 1992, 388 waters by 1996, 509 waters by 1998 and most recently a new high of 684 impaired waters. In short, pollution problems are growing in the absence of TMDLs. This fact is confirmed by the most recent National Water Quality Inventory, which shows—for the first time in many years—that overall water quality of the Nation's rivers, lakes, estuaries and coastal waters is getting worse.

Instead of responding to these water pollution problems by doubling its efforts to implement the TMDL program, EPA's current managers are considering and perhaps poised to adopt a proposal that would reverse the progress made to date. The EPA's proposal would abruptly limit the scope of the TMDL program and, for those lucky waters where the TMDL program might still apply at all, turn Congress' pollution control mechanism into a paper exercise whose only relevance to a waterbody's water pollution control efforts is to legitimate less stringent controls on existing discharges without any corresponding pollution reductions by other sources. That vision of the TMDL program's purpose directly contravenes Congress' vision.

I would like to highlight six of the key problems I find in EPA's draft proposal to rewrite the existing TMDL regulations.

EPA'S DRAFT RULE ILLEGALLY TRUNCATES THE UNIVERSE OF WATERS CONGRESS INTENDED TO PROTECT OR CLEAN-UP THROUGH THE IMPLEMENTATION OF TMDLS

First is the use of listing criteria that, if implemented, would illegally and illogically restrict the use of TMDLs to a relatively small number of waterbodies, ignoring thousands of waters that Congress envisioned would be protected and/or cleaned up through a TMDL. Listing decisions are critically important because whether a water is listed and scheduled to get a TMDL is the gateway into the entire clean-up program. If a water is not listed (or is on some list other than the list of waters requiring a TMDL) then that water will not benefit from the program. Therefore, it is important for the Committee to understand the ways in which EPA is trying to close the gateway into the TMDL program to thousands of waters across the country that Congress required be included in the TMDL program.

EPA's draft rule completely ignores the express terms of Section 303(d)(1), the requirements put in place by Congress. Under the statute, the only question relevant to listing a waterbody under section 303(d)(1) is "were BPT and secondary treatment sufficient to implement all applicable water quality standards?" If a waterbody is impaired or has ever been impaired since the implementation of BPT and secondary treatment requirements, the answer to that question is obviously "no." If a waterbody has no point source discharges to which either BPT or secondary applied, the answer also must be "no." It is as simple as that.

In contrast, EPA's draft rule proposes a complicated set of five categories of waters, only one of which is apparently identified as a list required by Section 303(d). None of the five categories tracks the listing criteria established by Congress in that section. Indeed, the criteria identified by EPA to establish the categories, in most instances, include waters that Congress' Section 303(d)(1) criteria mandate including on the Section 303(d) list and the preparation of a TMDL.

Going through each of the categories described in the draft, the draft rule places in its Category 1 waters those waters that currently are attaining all designated uses. Although some of these waters may not have to be listed for a TMDL under the statute, such currently clean waters do need to be listed and a TMDL prepared if attainment with the standards is not the result of BPT or secondary treatment. The draft rule's Category 2 waters include those waters where only some designated uses are attained but there is insufficient data to determine whether other uses are being achieved. According to the statute, all of these waters must be listed because, especially at this late date almost 30 years after implementation of BPT and secondary treatment requirements, it is certain that BPT and secondary treatment were not stringent enough to implement these waters' standards. EPA's Category 3 waters include those waters where there is insufficient information to determine whether or not compliance with standards is achieved. These also must be listed, again, to the extent that BPT and/or secondary treatment were not sufficient to implement standards. Category 4A is a list of those waters, impaired or otherwise, for which TMDLs already have been established. Congress did not intend for waters to be removed from the 303(d) list just because a TMDL was prepared. Obviously, they may no longer need a TMDL but they must remain on the list in order to implement Section 303(d)(4) and to assure the TMDL remains intact and up to date into the future. Indeed, Section 303(d)(4) invokes the antidegradation policy "[f]or waters identified under paragraph [303(d)(1)(A)] where the quality of such waters *equals or exceeds* levels necessary to protect the designated use for such waters or required by applicable water quality standards," underscoring the fact that the criteria for listing waters under section 303(d)(1)(A) encompasses waters that are not yet impaired and, hopefully, will never be impaired.

Perhaps of greatest concern is Category 4B waters where it is known that standards are not being attained but other "enforceable" pollutant control mechanisms are alleged to be in place and purportedly designed to attain water quality standards within a reasonable timeframe. These waters by definition must be listed under 303(d)(1)(A) and TMDLs completed for them. EPA has no authority to substitute other pollutant control mechanisms as listing and TMDL criteria to replace those selected by Congress, i.e. BPT and secondary treatment. The agency cannot keep a water off the 303(d) list because standards were achieved by implementation of best available technology. Nor can EPA refuse to list waters where a non-TMDL based water quality-based effluent limit achieved standards. And the agency certainly cannot eliminate waters from States' 303(d) lists based on some future, unnamed trading programs or other untested programs.

The agency's Category 4C waters include impaired waters where the impairment is not caused by a pollutant. Although it's difficult to imagine what impaired waters would fit this description, this category is apparently an effort by the agency to eliminate waters from the list that are impaired by low flows or otherwise sensitized

to pollution discharges by disturbances other than pollution discharges. I cannot imagine a source of impairment that does not involve either point or nonpoint sources of pollution. Even streamside tree canopy removal that reduces shade along a stream resulting in temperature pollution amounts to nonpoint source pollution and can be readily addressed through a TMDL.

The last and final category—Category 5—is the only section 303(d) list proposed by EPA's draft rule. The list is limited to waters that are currently impaired and that do not fit into any of the other categories. Nothing in the statute suggests that such a truncated list satisfies the conditions established by Congress.

Notably, EPA rejects any category, whether under section 303(d) or not, for threatened waters. Again, by definition, waters whose standards are threatened with exceedances are directly addressed by Congress' listing criteria for Section 303(d). If a waterbody's standards are threatened now in 2003, then it is clear that the pollution control technology applied back in the late 1970's does not have much chance of assuring the implementation of the threatened standards today. Likewise, ignoring threatened waters will in almost every case violate the Clean Water Act's antidegradation requirements. EPA, apparently aware of this contradiction, simply proposes to eliminate consideration of the Federal and State antidegradation standards when implementing section 303(d), a cynical and underhanded proposal addressed further below.

To summarize the listing concerns, it is clear that the draft proposal bears little if any relationship to Congress' Section 303(d) criteria. EPA's truncated list will prevent thousands of critical but currently clean waterbodies from being protected by the TMDL program, assuring a continuous supply of new impaired waters for future agencies' to have to contend with cleaning up. In a very real way, by truncating the list, EPA also may very well undermine the States' ability to establish their own priorities for establishing TMDLs by not allowing them, for example, to put a critical but threatened water supply on the list and perhaps ahead of an impaired but less important water.

EPA'S DRAFT RULE WILL RESULT IN INEFFECTIVE TMDLS THAT WILL UNDERMINE ANY POTENTIAL FOR EFFECTIVE POLLUTION TRADING SCHEMES

The other five concerns address aspects of EPA's proposals to rewrite the rules that, if implemented, would render TMDLs ineffective at protecting water quality.

The first of these is the untenable assertion by EPA that the agency is not required to review and approve the States' allocation of a TMDL for a given pollutant to the various sources discharging that pollutant as part of EPA's obligation to approve or disapprove TMDLs. That approach entirely undermines the agency's duty, assigned to it by Congress, to review States' TMDLs and to make sure that they are established at a level necessary to implement the applicable water quality standards. EPA must review the "load established" by each State. 33 U.S.C. § 1313(d)(2). That established load to be reviewed by EPA "shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account lack of knowledge concerning the relationship between effluent limitations and water quality." 33 U.S.C. § 1313(d)(1)(C). Hence, EPA is obliged to review any TMDL based on that standard and based on resulting effluent limitations. As a rational and scientific matter, EPA cannot make a finding that a TMDL will implement standards throughout a watershed without reviewing and approving the allocations. In addition, allocations are expressly referenced in the Act. See section 303(d)(4), 33 U.S.C. §1313(d)(4). EPA is wrong that allocations are not required by section 303(d).

Second is a related problem, which is the general theme throughout EPA's proposal—moving away from allocating pollution reductions needed to implement a TMDL to specific, individual sources and, instead, allocating larger portions of a TMDL to many sources, albeit perhaps similar in nature. Hence, the proposal includes the concept of establishing gross allocations of a TMDL to entire categories of dischargers throughout a watershed, including, for example, all logging, all farming, all grazing, all non-NPDES storm water, all marinas, all dredging and all dams. Similarly, the proposal floats the idea of a gross allocation for all future growth within a watershed, regardless of location or localized pollution impacts or similarity of pollution sources. Simply allocating a single load to, for example, all logging dischargers in a watershed will not implement standards throughout that watershed. Nor would EPA be able to find that a TMDL allocated in such a manner will implement such standards throughout the watershed. The agency will have no ability to determine where the categorical logging load will be discharged and hence whether the upstream waters will be protected. I also would think that the agency would be concerned about not requiring a TMDL to be allocated to specific individual

sources if it hopes to ever create functional pollution trading opportunities from this program. Lump sum allocations as described in the draft will doom any such trading schemes from the start because nobody will know how much loading (i.e. how many pollution shares) they control and must reduce.

A third problem stemming from EPA's incorrect assertion that the agency does not have to review a State's allocations in approving a TMDL is EPA's proposal that States be allowed to reallocate its TMDL after EPA approves it. The notion that EPA believes it can review a TMDL and determine that it will assure implementation of water quality standards without reviewing the TMDL's allocations in the first place and allowing a State agency to alter those allocations however it wants is irrational and a complete abandonment of science as well as the law.

Fourth, the draft proposal allows existing NPDES dischargers to increase their loadings of pollutants that are still impairing a waterbody immediately after a TMDL is drafted, even when there have been no reductions whatsoever from other sources and no guarantee that such reductions will ever occur. That, of course, is a recipe for further impairment, not clean-up. Such a TMDL scheme would not implement applicable water quality standards. Instead, for a possibly indefinite amount of time, it would simply provide an unwarranted excuse for existing point source discharges to expand their contribution to a waterbody's impairment or degradation while absolutely no pollution reductions are realized from nonpoint or other sources. In order for Congress' goals for the Act and the TMDL program to be realized, it is clear that existing point source pollution must be further controlled as long as no progress is made in reducing pollution from nonpoint sources into a waterbody that is impaired or being degraded.

The fifth and last concern I will discuss today is EPA's suggestion that the agency can simply ignore the Federal and state antidegradation policies from consideration when establishing or reviewing TMDLs. EPA's contemplated slashing of that core principle, a principle embodied by every word of the Clean Water Act, strikes at the heart of Congress' intent in creating the TMDL program and best exemplifies EPA's underhanded effort to distort the purpose of the TMDL program from a regulatory mandate to protect and restore water quality to a regulatory shield providing dischargers cover while they continue to pollute and degrade the Nation's waters. Every State in the country is required to have an antidegradation policy established as one of the three mandated components of its water quality standards. The entire scheme of the Clean Water Act hinges on the concept that waters become less polluted until all uses are fully protected and, indeed, all pollution is eliminated. By thinking about removing antidegradation requirements from the ambit of the TMDL program, EPA sentences the nation's waters to further spoliation and sentences the States and the American public to ever expanding lists of impaired waters.

This is not an exhaustive list of concerns. Other significant problems exist in the EPA draft, including the agency's refusal to acknowledge the "daily" loads required by Congress; the excessive length of schedules proposed for establishing the truncated list of TMDLs; the proposal to allow less frequent 305(b) reports despite the Act's mandate that such reports be submitted by the State every 2 years and, hence, the fictional assertion that allowing integrated 303(d) and 305(b) reports every 4 years will amount to significant cost savings by the States; the questionable reading of the thermal list required by section 303(d)(1)(B); the incorrect notion that EPA or the States have authority to delist waters under section 303(d), and; last but perhaps not least, the bizarre notion that "natural background' could include pesticides in sediments are all significant concerns. The above concerns will be further addressed by the environmental community should EPA's proposal ever see the light of day.

Taken together, the proposals in EPA's rewrite of the TMDL program will virtually guarantee that this important Clean Water Act program will be rendered entirely ineffective at protecting and cleaning up the Nation's waters. This rewrite of the rules will condemn the over 215 million Americans who currently live within 10 miles of a polluted waterbody to a least another generation of unsafe waters and will add many more Americans around the country to that group as their community's waters get more polluted from point and nonpoint sources. Therefore, we urge the Committee to encourage EPA to withdraw the draft proposal before expending its limited resources on a blatantly illegal proposal.

EPA'S ARBITRARY STORM WATER EXEMPTION FOR THE OIL AND GAS INDUSTRY

While working on rulemaking that would dismantle the TMDL program, EPA also has been busy doling out favors in the form of special exemptions to Clean Water Act requirements for certain industries, including the oil and gas industry. In particular, I would like to state Earthjustice's objection to the agency's rulemaking this

past March delaying for at least 2 years the Phase II storm water permitting rules that otherwise would have gone into effect on March 10, 2003 for construction activities by the oil and gas industry at their exploration and productionsites. EPA's special exemption for the oil and gas industry was based on undocumented and last minute claims by the industry's lobbyists that somehow that industries' construction activities were qualitatively different from every other construction activity in the country. Whether a 2.4 acre or 105,000 square foot site is cleared and graded by a housing developer, an office building developer, or an oil and gas drilling operation does not make the dirt and sediments any less erosive or any less capable of polluting. Who builds a road also will not alter its potential for pollution. Indeed, the pollution threats from drilling sites go well beyond those posed by sediment discharges and the many dischargers who are now subject to the Phase II regulations. Storm water from drilling activities contains not only sediments and silts, but also oil and grease, drilling compounds and other construction related materials. The cumulative threat of 30,000 industrial construction sites cannot be ignored if Congress' mandate that all storm water discharges be controlled through the NPDES program and the resulting environmental benefits are to ever be attained.

Industry argues that oil and gas exploration and production, including pre-drilling construction activities, are exempt from NPDES permitting pursuant to section 402(l)(2) of the Act, 33 U.S.C. § 1342(l)(2). The express language of that section does not support industry's argument. By its terms, Section 402(l)(2) does not include any storm water runoff that has either been "contaminated by contact with, or do[es] not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct, or waste products, located on the site of such operations." The disturbed soils around drilling wells are both overburden and waste products. See Sen. Rep. No. 99–50 at 44 (May 14, 1985) ("[e]xamples of contamination include suspended or dissolved solids from . . . disturbed soils"). Hence, any storm water contacting the disturbed areas of a drilling site, if discharged, is not exempt from the Act's permitting requirements.

The legislative history makes even clearer the limited scope of the exemption set forth at Section 402(l)(2). The final conference report for the Water Quality Act of 1987 makes it clear that Section 402(l)(2) "provides that permits are not required where stormwater runoff is diverted around mining operations or oil and gas operations and does not come in contact with overburden, raw material, product, or process wastes. In addition, where stormwater runoff is not contaminated by contact with such materials. . . ." H.Rep. Conf. Rep. No. 99–1004 at p. 152 (Oct. 15, 1986). See also H.R. Rep. No. 99–189 at p. 37 (July 2, 1985) ("The subsection was developed by the Committee in recognition of the fact that there are numerous situations in the mining and oil and gas industries where stormwater is channeled around plants and operations through a series of ditches and similar devices in order to prevent pollution contamination of the stormwater").

Nothing in EPA's administrative record, including the numerous industry comments, suggests that storm water is routed around such drilling sites. Nor do any of those comments suggest that storm water falling on or flowing through these sites are then free of sediment and other pollutants. Indeed, the opposite appears to be true. See Letter from Warren County Conservation District (Jan. 23, 2003) (EPA Docket Item OW–2002–0068–0023); Letter from California State Water Resources Control Board (Jan. 31, 2003) (EPA Docket Item OW–2002–0068–0082).

In California, I had the opportunity to work on the implementation of the Phase I industrial and construction storm water permit and have been involved in the past in numerous actions enforcing those general permits. Compliance with the storm water requirements is not complicated, relying in large part on the implementation of best management practices, many of which have been available for years. The oil and gas industry need merely pick the appropriate measures off of the shelf, articulate those in a storm water management plan that, in many cases, would be easily transferable to nearby drilling sites, and monitor to assure compliance. This is no more than what is expected of much smaller businesses who have been implementing the storm water requirement for the past decade, including thousands of mom-and-pop businesses with much fewer resources than the oil and gas industry.

Ironically, EPA's abdication of its duties may result in less certainty for the oil and gas industry. EPA's duty to establish regulations is separate and distinct from the Act's mandate that all storm water point sources obtain NPDES permits. Right now, it is certain that thousands of oil and gas drilling sites are in violation of the Act by discharging pollutants without a permit. Rather than assure an orderly process for issuing permits to that industrial sector, as intended by Congress, EPA has simply ceded it to private citizens and the courts to enforce the law. I would think the oil and gas industry would prefer the certainty of EPA regulations to the uncer-

tainty of an illegal interpretation of the Clean Water Act that exposes them to lawsuits.

EPA'S BACKROOM NEGOTIATION REGARDING LIMITING THE WATERS OF THE UNITED STATES PROTECTED BY THE CLEAN WATER ACT

I also want to highlight a strong concern regarding legal maneuverings that appear to be occurring in the context of litigation filed by the American Petroleum Institute and other oil industry representatives challenging rules promulgated by EPA in July 2002 addressing oil spill prevention and response requirements for businesses that store large quantities of oil (greater than 1320 gallons). These rules are generally referred to as the Spill Prevention Control and Countermeasures ("SPCC") rules. As part of that rulemaking, EPA updated and clarified the definition of "waters of the United States" included in the SPCC rules to be consistent with the regulatory definitions of "waters of the United States" included elsewhere in the Clean Water Act regulations. The definition EPA adopted for the SPCC rule is essentially the same definition already promulgated throughout the Clean Water Act regulations, including at 40 C.F.R. §§ 122.2, 230.3(s) and 33 C.F.R. § 328.3(a).

The main thrust of the oil industry's challenge is an allegation that EPA's definition of waters of the United States goes beyond those waters protected by the Clean Water Act. Industry argues that the requirements of the Clean Water Act are limited to discharges of pollutants to traditionally navigable waters and wetlands adjacent to such traditionally navigable waters. In essence, the oil industry would like to exempt tens of thousands of facilities from the SPCC rules if, for example, any potential oil spill would flow to a small creek or ephemeral stream, despite those waters' clear connections to downstream waters and the potentially devastating effects of an oil spill, especially one beginning in the headwaters of a watershed and adversely affecting all downstream waters.

Industry's primary basis for its assertion is an exaggerated reading of the Supreme Court's 2001 decision in *Solid Waste Agency of Northern Cook County* v. *United States Army Corps of Engineers*, the so-called "SWANCC" decision. Industry's expansive view of SWANCC is inconsistent with that decision's express terms. SWANCC simply ruled that the Corps could not use the "Migratory Bird Rule"—a portion of a 1986 Federal Register preamble—as a sole basis to regulate waters used by migratory birds. The decision does not suggest that intrastate waters that are used in or affected by interstate commerce, for example, by a group of anglers or a power plant feeding electricity to a multi-State grid that uses a lake's waters for cooling, would not be subject to the Clean Water Act.

Industry's wish that SWANCC was a more expansive ruling also is inconsistent with over two dozen Federal court briefs filed on behalf of EPA and the Army Corps by the Department of Justice and emphasizing the limited ruling in SWANCC and the necessity of EPA's existing definition of water of the United States in order to implement the Clean Water Act consistent with Congress' mandate. Last, virtually every court that has considered the scope of the holding in SWANCC has ruled that the holding is limited to the facts and express ruling in that case and has no effect on EPA's or the Corps' existing regulatory definitions.

According to the industry plaintiffs, settlement discussions are ongoing on the appeals of the SPCC rule. NRDC and the Sierra Club, represented by Earthjustice, have sought to intervene in the case. While awaiting the court's ruling on that request, the groups have asked to participate in the settlement discussions but this request has been denied. We are very concerned that the discussions going on now behind closed doors will lead to some tacit acknowledgement by EPA that industry's strained reading of SWANCC has some merit and that EPA may withdraw regulations embodying a definition that the agency has stood by for almost three decades.

I hope that EPA will vigorously defend the broad jurisdiction of the Clean Water Act established by Congress, and not cave to the wishes of the oil industry to create another special standard for that industry. EPA should not resort to a cowardly retreat from decades of clear, regulatory direction assuring broad coverage of the Act and accompanying certainty to businesses by hiding its complicity with the oil industry to undermine one of our country's most important environmental laws behind closed-door settlement negotiations. If the agency retreats from its long-established definition of waters of the United States this would, at best, set the agency and the regulated community on a path of uncertainty that would be easily avoided if EPA were to simply defend its long-standing definition of waters of the United States.

CONCLUSION

It is important to keep in mind that EPA's above-described activities are a few of many efforts by the agency that do not bode well for the Clean Water Act and

the future health of America's rivers, lakes, streams, wetlands, and coastal waters. The above proposals are the most recent examples of an expanding pattern by the agency to cut back the protections of the Clean Water Act. The thousands of polluted lakes, rivers, and ocean waters around the country will not be cleaned by EPA walking away from the problems, and the States taking the agency's cue and following close behind. The gains that have been made in protecting many of the country's waters will be lost if EPA continues on its current path. We are the children left with cleaning up the rivers polluted by our parents' and grandparents' generations. If we are to avoid leaving our sons and daughters with a lot more polluted rivers and lakes, EPA must abandon its efforts to dismantle the current TMDL program, take more aggressive steps to implement the current regulations, and assure that every industry, including the oil and gas industry, abide by Congress' clear directives to protect and cleanup our Nation's waters.

I hope my comments assist the Committee in its oversight of EPA's current implementation of the Clean Water Act. Thank you again for this opportunity to appear before the Committee.

RESPONSES OF MICHAEL R. LOZEAU TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS

Question 1. We heard in testimony that the EPA's proposed rewrite of the TMDL rules could undermine effective trading. This is interesting to me because trading is something that the EPA testified they support. Can you describe how the TMDL proposal undermines trading among pollution sources?

Response. EPA's proposed rewrite of the TMDL rules will undermine the prospects for water pollution trading in at least seven ways:

i. The draft rule's built-in vagaries and conscious lack of clarity provides no incentive for pollution sources to contribute resources to any given TMDL and any accompanying trading proposal. As I stated in my testimony, EPA's proposal would allow for only "gross allocations" of responsibility for sources' contributions of pollutants to a waterbody. Not only is such a scheme illegal, in that EPA will be unable to find that a TMDL allocated in such a manner will implement water quality standards throughout the watershed, but these lump sum allocations will doom trading schemes because pollution sources will not know how much loading they must reduce. See Response #5 below. If these sources are not identified as the source of a pollution problem, they will have no incentive to participate in any trade. Following the existing law, which requires specific allocations, would encourage buy-in and resource contributions from pollution sources to formulate trading proposals that could subsidize the states' generally cash-starved water quality programs.

ii. Similarly, by allowing gross allotments, the proposed TMDL rule fails to identify a watershed's market participants. A TMDL rule that defined the marketplace in which trades would occur could establish one of the basic components of a trading scheme.

iii. By allowing for gross allotments of pollution responsibility within a TMDL, the proposed rule fails to provide any science-based scheme for creating and distributing pollution "shares." On the other hand, if a TMDL identifies each individual source and quantifies their individual load, then the shares of a potential trading program would be self-evident.

iv. Those same gross allotments will preclude EPA from assuring that water quality standards and beneficial uses throughout a watershed would be implemented by a TMDL. By the same token, EPA's proposed gross allotments would prevent the agency from procuring and reviewing the information and data necessary to assure that any proposed trading scheme for that watershed would not cause hot spots within the watershed. This also is true of the proposal that EPA not review TMDL allocations at all.

v. Obviously, identifying individual sources is a prerequisite to monitoring their compliance with their allocation. Without provisions for monitoring of individual sources and the ability of market participants and others to enforce individual pollution allocations, a legitimate and functional trading scheme amongst individual sources will not come to pass.

vi. By allowing the states and local agencies to alter their general allocations without review by EPA would make those allocations and their resulting "market" values less certain and less capable of prediction, thereby discouraging participation by potential traders.

vii. A TMDL rule that purported to encourage trading also would not include any allocations for future growth or other new pollution sources. Trading, if it

were to have any chance of proving effective at all, would require a firm total maximum daily load that was fully protective of beneficial uses and standards throughout a watershed. It also would have to include very specific allocations to existing individual sources, not based on their current pollution levels, but on levels necessary to comply with the TMDL. No allocations would be given to future sources or increased pollution from existing sources. Those new quantities of pollution would only be allowed if the source were to buy up existing allocations in an amount greater than the proposed increase. The "offset" ratio would presumably be determined by the schedule for achieving the TMDL and compliance with standards.

Question 2. Why is the SPCC rule itself important, aside from the interactions with the SWANCC decision? In other words, what protections will be lost while implementation of the rule is delayed for the oil and gas industry?

Response. The SPCC Rule is intended to prevent oil discharges from reaching navigable waters of the United States or adjoining shorelines. It applies to owners or operators of facilities that drill, produce, gather, store, use, process, refine, transfer, distribute, or consume oil and oil products. The SPCC rule requires facilities that store more than 1,320 gallons of oil to prepare a spill prevention control and countermeasure ("SPCC") plan. These plans help prevent oil discharges by such facilities and mitigate the damage caused by such discharges if and when they occur. In addition to preparing SPCC plans, the rule requires facilities to institute a number of preventative measures to reduce the risk of spills. These measures include tank leak detection, spill overfill protection, pipe external protection, and secondary containment. A 1995 EPA survey demonstrated that compliance with even one of these requirements reduces both the number of spills and the amount of oil that migrates outside of a facility's boundaries. 62 Fed. Reg. 63817/2 (1997).

EPA amended the SPCC rule in July 2002. The amendments generally clarify the language and organization of the rule. The July 2002 Rule confirmed the broad applicability of these requirements to all navigable waters—i.e., "waters of the United States." The final rule also requires a number of improvements in the plans themselves. For instance, it requires that all SPCC plans be reviewed and certified by a professional engineer, that facilities evaluate potential for brittle-fracture of aboveground containers, and that all buried piping use a protective wrapping and coating.

Postponing the compliance date for the new rule delays implementation of these improvements in the SPCC program, thereby increasing the risk of oil spills from these facilities. According to EPA, one gallon of oil can contaminate one million gallons of water. There are approximately 24,000 oil spills each year in the United States, with more than half of those spills occurring inland where they contaminate streams, rivers, and wetlands.

Question 3. In your comments, you mentioned that the real effect of the Administration's TMDL regulation on the water quality program would be to return to pre-1972 TMDL protections. Can you provide more detail on this point?

Response. Prior to the 1972 amendments that created the modern Federal Water Pollution Control Act, the national water quality program relied on the states to directly enforce their water quality standards against individual discharges. As is emphasized in the FWPCA's legislative history, those efforts proved ineffective and spurred the 1972 amendments' focus on establishing effluent limitations in permits as a means of implementing the states' water quality standards. TMDLs were part of that concept, filling in the gaps left by the point source permitting program to identify and quantify all pollution sources to a listed water body and, although not always requiring a NPDES permit to address each of those sources (i.e. the nonpoint sources), at least quantifying each sources maximum load of pollutants that they could release to a waterbody. That load limit could then be implemented either through the NPDES program or the various nonpoint source programs set forth by the Act.

By rewriting the existing TMDL rule to say that states do not have to identify specific pollution sources and can allocate pollution to numerous sources in one lump sum, EPA essentially gives up on the meaningful role for TMDLs contemplated by Congress and attempts to turn them into the same unenforceable, general standards that were proven to be ineffective in the past. In addition, because the TMDLs, even if allocated on these gross bases, will in turn be relied upon to change existing limitations that currently apply to point sources in listed waterbodies, I am concerned that inaccurate TMDLs setting forth gross allocations that cannot be ground-truthed will result in a weakening of effluent limitations for the relevant point sources. Meaningless gross allocations for many pollution sources coupled with less stringent effluent limitations for point sources looks and feels a

lot like the disavowed programs from prior to 1972—programs described by the late Senator Muskie, upon introducing the bill that was to become the Clean Water Act, as "inadequate in every vital aspect." 117 Cong. Rec. 17397 (daily ed. Nov. 2, 1971).

Question 4. In Mr. Kouplen's testimony, he states, "Section 303(d) provides no authority for the preparation or establishment of an implementation plan. It merely envisioned the translation of wasteload allocations into water quality based effluent limitations for point sources. " Can you comment on his interpretation of section 303(d)?

Response. To the extent Mr. Kouplen's testimony suggests that the only meaningful limits resulting from a TMDL are the water quality-based effluent limitations for point sources, he clearly is wrong. TMDLs also are required to address nonpoint sources of pollution. TMDLs must be "established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety. . . ." 33 U.S.C. § 1313(d)(1)(C). Water quality standards must be implemented throughout a listed waterbody, not merely at some arbitrary downstream point or in the larger order streams within a watershed. Upstream waters and tributaries must comply with standards. That is the standard that EPA must apply in reviewing and approving or disapproving a TMDL.

So, although it is true that Section 303(d) does not call for something called an "implementation plan," it does require a TMDL to include a specific allocation of loadings for each specific pollution source in a waterbody in order to "implement" the applicable water quality standards. Without individual, source-specific allocations, it is impossible for either a state or EPA to find that the TMDL is "established at a level necessary to implement the applicable water quality standards." The sole purpose of a TMDL, its very reason for being, is to implement water quality standards. Given the objective, water quality driven criteria that must be used to develop a TMDL, any need for an additional "implementation plan" is hardly necessary. If completed with the level of detail necessary to achieve Congress' criteria, implementing a TMDL's allocations should be a relatively simple matter of adopting the point source allocations into existing NPDES permits and adopting the nonpoint source allocations into the existing nonpoint source management plans.

Question 5. Can you comment on Mr. Kouplen's analysis of the impacts of the Pronsolino case that he included in his written testimony?

Response. I do not believe the Pronsolino decision assists Mr. Kouplen's analysis asserting that EPA may only set an overall goal but how that overall goal will be achieved is reserved for the States. If I am correct, the analysis Senator Jefford's question is referring to in Mr. Kouplen's testimony concludes by saying "allocation decisions are the essence of implementation planning that has been strictly reserved for the states." Mr. Kouplen's assertion is not based in the statutory language or common sense. As described above, how a TMDL is allocated to specific pollution sources is an elementary component and cannot be separated from the TMDL itself if the state and EPA are claiming to establish or approve the TMDLs based on the express criteria of Congress.

Mr. Kouplen's assertion that the formal TMDL to be reviewed and approved by EPA consists of a single number allowing for one gross loading figure of a pollutant into some large waterbody would not be indicative of a loading established at a level necessary to implement the applicable water quality standards. A TMDL cannot be established in any realistic sense except as the sum of its component allocations and, without knowing where and how much a TMDL's allocations occur, no agency—no objective scientist—can say that the TMDL is established at a protective level throughout that waterbody. In other words, Section 303(d) mandates that EPA review allocations in order to assure that a TMDL is at a level necessary to implement standards in every part of the waterbody, not just the one downstream point where the gross load could theoretically be measured.

Question 6. In Mr. Fuller's testimony, he states that he believes that Section 402(l)(2) was intended to exempt all oil and gas activities from all storm water permit requirements. In reviewing the legislation history on this issue, I believe that his interpretation is incorrect. Specifically, the statute lists three main criteria to determine if this provision applies to a particular discharge:

- First, the discharge must be "stormwater runoff from mining operations or oil and gas exploration, production, processing, or treatment operations or transmission facilities. . . ."
- Second, the flow must be "composed entirely of flows which are from conveyance or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying' precipitation runoff. . ."

• Third, the flow must be "not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations. "Section 402(1) clearly applies only to particular types of discharges from particular types of systems. It does not provide authority for a blanket exemption to the Clean Water Act NPDES permitting requirements. A number of questions arise with regard to the application of Section 402(l) (2) to the phase I and phase II programs. What is the difference between flows from conveyances or systems of conveyances and the discharges resulting from a construction project? Are flows from oil and gas construction sites uncontaminated as envisioned by section 402(l)(2)?

Response. In short, it is clear that Section 402(l)(2) does not exempt all oil and gas activities from the NPDES permitting program as asserted by Mr. Fuller. There is a distinction between a construction site and subsequently constructed conveyances. And disturbed soils and other pollutants washed by storm water from construction sites associated with oil and gas exploration are contaminated discharges.

If we are talking about grading and preparing a site for construction activities, in most instances, those sites will be devoid of any conveyances or systems of conveyances. Without such conveyances, the exemption is not triggered. Even if there were some temporary conveyance systems set up to collect rainwater from the construction area, those conveyances, by definition, would not be conveying storm water around the construction area and its polluting materials but from it. If those discharges include pollutants, they are not exempted pursuant to section 402(l)(2). In addition, Congress anticipated disturbed soils, such as are encountered at any construction site, to be one type of pollutant that would preclude the section 402(l)(2) exemption. See Sen. Rep. No. 99–50, pp. 44–45 (May 15, 1985) ("Examples of contamination include heavy metals or suspended or dissolved solids from process wastes or disturbed soils, or salts, surfactants, or solvents used or produced in the oil and gas operations").

Question 7. Please provide your interpretation of the legislative history accompanying section 402(l)(2) of the Clean Water Act and its applicability to oil and gas construction sites, both large and small.

Response. My review of the legislative history leading up to Congress' enactment of Section 402(l)(2) shows that Congress did not specifically address discharges of pollutants from construction activities in anticipation of drilling an oil and gas well. Because exemptions from the CWA's permitting program cannot be implied, that alone is sufficient to show that Congress did not intend to exempt such discharges. There is support in the legislative history that the section 402(l)(2) exemption is limited in scope. 131 Cong. Rec. H 19846, 19855 (July 22, 1985) (Statement of Mr. Breaux) (Section 402(l)(2) a "limited stormwater exemption"). The main rationale for the exemption was to avoid discouraging voluntary efforts by the mining and oil and gas industry to route unpolluted storm water around their operations in order to prevent it from being contaminated:

> The subsection was developed by the Committee in recognition of the fact that there are numerous situations in the mining and oil and gas industries where stormwater is channeled around plants and operations through a series of ditches and similar devices in order to prevent pollution contamination of the stormwater. Many of these stormwater run-off devices are voluntary means of pollution control.

See H.R. Rep. No. 99–189, p. 37. If there are no storm water conveyances, it is clear that the exemption is not triggered. See H. Rep. Conf. Rep. No. 99–1004, p. 150 (Oct. 15, 1986) ("To be exempted, such discharges must be composed entirely of flows of precipitation, runoff from conveyances or systems of conveyances used for collecting and conveying such water"). It also is clear from the history that any runoff polluted by the oil and gas or mining operations would not qualify for the permitting exemption, though Congress left EPA with some discretion to determine whether conveyed runoff that does come into contact with overburden, raw material, product, or process wastes is contaminated or not. See id. ("any stormwater which has come into contact with any potential pollutant would not be eligible for the stormwater runoff exemption"); see also H. Rep. Conf. Rep. No. 99–1004, p. 151 (Oct. 15, 1986) ("where stormwater runoff is not contaminated by contact with such materials, as determined by the Administrator, permits are also not required").

In conclusion, it is clear that section 402(l)(2) does not expressly exempt construction activities at oil and gas or mining sites. The legislative history does not suggest otherwise. Instead, the legislative history supports a conclusion that, without conveyances, as would normally be the case for a grading project, the exemption does not apply. Moreover, even assuming that the construction phase of a drilling site

is not generally outside the scope of section 402(l)(2), EPA has discretion to determine whether runoff from oil and gas and indeed any construction sites is contaminated or not. It would be entirely arbitrary if EPA were to conclude that stormwater from construction associated with potential oil and gas exploration is not contaminated but it is contaminated from every other construction site of one acre or more anywhere else in the country.

STATEMENT OF LEE FULLER, VICE PRESIDENT, GOVERNMENT RELATIONS FOR THE INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA (IPAA) ON BEHALF OF THE ASSOCIATION OF ENERGY SERVICE COMPANIES; THE INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS; THE NATIONAL STRIPPER WELL ASSOCIATION; THE PETROLEUM EQUIPMENT SUPPLIERS ASSOCIATION; THE U.S. OIL & GAS ASSOCIATION; CALIFORNIA INDEPENDENT PETROLEUM ASSOCIATION; COLORADO OIL & GAS ASSOCIATION; EAST TEXAS PRODUCERS & ROYALTY OWNERS ASSOCIATION; EASTERN KANSAS OIL & GAS ASSOCIATION; FLORIDA INDEPENDENT PETROLEUM ASSOCIATION; ILLINOIS OIL & GAS ASSOCIATION; INDEPENDENT OIL & GAS ASSOCIATION OF NEW YORK; INDEPENDENT OIL & GAS ASSOCIATION OF PENNSYLVANIA; INDEPENDENT OIL & GAS ASSOCIATION OFWEST VIRGINIA; INDEPENDENT OIL PRODUCERS ASSOCIATION TRI-STATE; INDEPENDENT PETROLEUM ASSOCIATION OF MOUNTAIN STATES; INDEPENDENT PETROLEUM ASSOCIATION OF NEW MEXICO; INDIANA OIL & GAS ASSOCIATION; KANSAS INDEPENDENT OIL & GAS ASSOCIATION; KENTUCKY OIL & GAS ASSOCIATION; LOUISIANA INDEPENDENT OIL & GAS ASSOCIATION; MICHIGAN OIL & GAS ASSOCIATION; MISSISSIPPI INDEPENDENT PRODUCERS & ROYALTY ASSOCIATION; MONTANA OIL & GAS ASSOCIATION; NATIONAL ASSOCIATION OF ROYALTY OWNERS; NEBRASKA INDEPENDENT OIL & GAS ASSOCIATION; NEW MEXICO OIL & GAS ASSOCIATION; NEW YORK STATE OIL PRODUCERS ASSOCIATION; OHIO OIL & GAS ASSOCIATION; OKLAHOMA INDEPENDENT PETROLEUM ASSOCIATION; PANHANDLE PRODUCERS & ROYALTY OWNERS ASSOCIATION; PENNSYLVANIA OIL & GAS ASSOCIATION; PERMIAN BASIN PETROLEUM ASSOCIATION; PETROLEUM ASSOCIATION OF WYOMING; TENNESSEE OIL & GAS ASSOCIATION; TEXAS ALLIANCE OF ENERGY PRODUCERS; TEXAS INDEPENDENT PRODUCERS AND ROYALTY OWNERS; WYOMING INDEPENDENT PRODUCERS ASSOCIATION

Mr. Chairman, members of the committee, I am Lee Fuller, vice president of Government Relations for the Independent Petroleum Association of America (IPAA). This testimony is submitted on behalf of the IPAA, the Association of Energy Service Companies, the International Association of Drilling Contractors (IADC), the National Stripper Well Association (NSWA), the Petroleum Equipment Suppliers Association (PESA), the US Oil & Gas Association (USOGA), and 33 cooperating state and regional oil and gas associations. These organizations represent petroleum and natural gas producers, the segment of the industry that is affected the most by regulations that are not cost effective and do not address real environmental risks.

This hearing addresses issues associated with regulations under the Clean Water Act. This testimony will focus on two specific issues that have significant potential implications for domestic oil and natural gas producers—regulations associated with the management of stormwater during the construction of oil and natural gas exploration, production, processing, or treatment operations or transmission facilities (E&P facilities) and expanded regulations for Spill Prevention, Control, and Countermeasure (SPCC) Plans.

Before presenting information on these provisions, it is important to understand the nature of domestic oil and natural gas exploration and production and the role of independent producers. Independent producers are companies that explore for and develop oil and natural gas. Typically, they only operate in these aspects of the petroleum and natural gas industries. There are approximately 7000 independent producers who are predominately small businesses employing an average of 12 employees each. However, they drill approximately 85 percent of the nation's oil and gas wells.

Domestic petroleum and natural gas production has changed over the years, particularly since the mid–1980's. Maturing production areas in the Lower–48 states and the need to respond to shareholder expectations have resulted in major integrated petroleum companies shifting their exploration and production focus toward the offshore in the United States and into foreign countries. More and more, these large companies must rely on large producing fields that are found only in frontier areas. Consequently, the role of independents is increasing in both the Lower–48 states and in the near offshore areas. For example, the independents' share of Lower–48 states petroleum production has increased from 45 percent in the mid–1980's to over 60 percent by 1995—and these states, despite their mature fields, still

account for 60 percent of domestic oil production. Similarly, independent producers account for 75 percent of overall domestic natural gas production. These trends will continue. The Nation will need a strong independent exploration and production industry to meet it future needs.

Another significant aspect of domestic production—particularly in the context of the effects of regulations—involves the critical role of "marginal" wells. Marginal oil wells are wells producing no more than 15 barrels per day or producing heavy oil; marginal natural gas wells are wells producing no more than 90 mcf per day. The average marginal oil well produces only about 2.2 barrels per day. But, they comprise 84 percent of domestic oil wells (over 400,000) and produce over 20 percent of our domestic oil—an amount roughly equal to imports from Saudi Arabia. Natural gas marginal wells account for about 10 percent of domestic production—or more than a third of current natural gas imports. Taken together, these marginal oil and natural gas wells are about 650,000 of the nation's 876,000 wells. However, they are the most susceptible to being shutdown when prices fall or costs increase. And, once shutdown, they are lost forever. During the low oil prices of 1998–99 domestic oil production dropped from about 6.5 million barrels per day to less than 6.0 million barrels per day. Most of this loss is attributable to the plugging of marginal oil wells. Average domestic crude oil production has never exceeded 6.0 million barrels per day since; in 2002 production averaged 5.817 million barrels per day.

This perspective is significant because the Clean Water Act regulatory issues that will be addressed in this testimony directly affect the development of new domestic production and the continuation of existing domestic production.

STORMWATER CONSTRUCTION PERMITTING ISSUES

The 1987 Clean Water Act (CWA) included two stormwater provisions that have become, through informal interpretation by EPA, intertwined regarding their application to oil and natural gas E&P facilities. Section 402(p) directs the Environmental Protection Agency (EPA), in general, to require permits for stormwater discharges from municipal and industrial activities under the National Pollutant Discharge Elimination System (NPDES) permitting program. At the same time, Section 402(l)(2) specifically excludes certain stormwater discharges from this requirement, including discharges of stormwater runoff from oil and natural gas E&P facilities, unless the discharge is contaminated by contact with, for example, products, byproducts, or wastes. As discussed in more detail below, EPA says that section 402(l)(2) does not to apply to clearing, grading, and excavating activities at E&P facilities, which EPA considers to be "construction activities" required to obtain a stormwater discharge permit, not E&P activities excluded by 402(l)(2).

IPAA believes that EPA has erred in its interpretation of the Clean Water Act with regard to the relationship between these sections as they apply to oil and natural gas E&P facilities. Congress spoke directly to the exclusion of stormwater related to E&P facilities in section 402(l)(2), and this specific statutory exclusion should control with respect to all activities normally associated with such facilities. Section 402(p) makes no mention of its applicability to construction activities in general, much less of an intent to undercut the specific exemption for E&P facilities in section 402(l)(2). However, despite this structure, EPA has—through a series of disconnected actions—pulled E&P facilities into the stormwater construction permitting program. Following is a summary of these events.

In 1990, EPA promulgated stormwater permitting regulations under Section 402(p). These regulations defined "industrial activities" to include construction activities that disturb five or more acres of land area or are part of a "common plan of development or sale" that ultimately will do so. At the same time, EPA promulgated regulations exempting stormwater discharges from E&P sites from the stormwater permit requirement, unless such discharges are "contaminated" in that they cause a reportable release of oil or hazardous substance or contribute to a water quality standard violation. In 1999,EPA issued Phase II stormwater regulations covering construction activities that disturb from 1 to 5 acres or are part of a common plan that will ultimately do so. Throughout this period, EPA's regulations exempting uncontaminated stormwater discharges from E&P facilities remained unchanged. Also during this period, however, EPA issued an internal, non-binding guidance memorandum interpreting the scope of section 402(l)(2). The memorandum was issued in December 1992 in response to a question from an enforcement coordinator in one Region. In it, EPA stated that clearing, grading, and other land-disturbing activities at E&P facilities were "construction activities," not E&P activities and, therefore the oil and gas exclusion in section 402(l)(2) did not apply. IPAA believes that this guidance is inconsistent with the law. However, industry's challenge

to EPA's 1992 memorandum was dismissed in 1994because of finality constraints on the courts' authority to review informal agency guidance.

As a matter of law and policy, EPA should evaluate the environmental risks and regulatory burdens created by its actions. In the case of oil and natural gas E&P facilities, IPAA does not believe that EPA made a reasonable assessment of either the risk or the burden. Nowhere in the information that IPAA has reviewed is there an indication of significant environmental risks associated with oil and natural gas E&P facility construction. Nor is there any indication that EPA understood the burdens its program would impose. For example, in an October 1999 report on the costs of the new Phase II requirements there is a revealing footnote, buried in several hundred pages of background and economic analysis, stating:

> Based on public comments received on the propose rule, EPA considered including oil and gas explorationsites but, upon further review, determined that few, if any, such sites actually disturb more than one acre of land.

In reality, most oil and natural gas exploration and productionsites fall within the one to five acre range. In 2000, a total of 31,732 exploratory and production wells were drilled over 10,000 in Texas and Oklahoma. To meet future natural gas demand, the National Petroleum Council estimates that the number of natural gas wells alone needs to increase to approximately 48,000 wells annually. However, in the EPA cost analysis of the Phase II program, it estimated that the number of construction starts would be approximately 130,000 units. But, none of these units were oil and gas facilities. Oil and gas facilities alone would increase the number of units by 25 percent with a third of that total coming from the two states of Texas and Oklahoma where EPA Region 6 must handle the administrative burdens. Overall, the ultimate economic consequences of the permit requirement could be staggering, by one estimate as much as $8 billion annually.

Three things are clear. First, if the current level of drilling activity presented stormwater runoff problems during construction, it would be well known. Second, the magnitude of permitting that EPA estimated during the regulatory development process is significantly understated. Third, because the Agency believed that oil and gas facilities were not affected, the final regulation is structured to address construction of building facilities—houses and commercial buildings.

This approach is inappropriate for oil and gas facilities. For example, subdivisions are properties that are purchased by the developer, go through an extensive design process, and have a construction period that may be months or years. There is more opportunity to build time for permitting into the schedule for a commercial or residential construction project, and more opportunity to respond to permit delays. In contrast, oil and gas production operations involve the leasing of sub-surface rights, often on private lands under oil and gas leases with short primary terms. Construction must occur within a matter of weeks, and timing is critical because failure to commence drilling and/or production and/or to maintain production will cause leases, and therefore oil and gas reserves, to be lost. Exploration and production of oil and gas reserves, moreover, involves obtaining a drilling rig, which must be quickly and carefully scheduled to coincide with drilling windows and lease obligations, and is paid for based on the number of days it is in use. Disruption in this process can place oil and gas leases, entire projects, and the ability to develop domestic onshore oil and gas reserves—not to mention substantial capital—at risk. These consequences are at issue in EPA's interpretation of the scope of the oil and gas exemption under section 402(l)(2), particularly with the impending decrease in the acreage threshold to one acre under the Phase II stormwater regulations.

The permitting process is further complicated by EPA's interpretation of its "common plan of development" concept. This concept requires projects to be permitted if, taken together, the components will ultimately exceed the permitting acreage threshold. For E&P facilities, this concept makes no sense. E&P facilities are dependent on the success of one well before locating and drilling the next. For the producer, there is no common plan.

In addition, EPA's existing "common plan" guidance is very confusing and difficult to apply to actual E&P activities. The definition is overly inclusive, in that activities otherwise consistent with the ordinary course of exploration and development of an oil and gas prospect would likely be grouped together by EPA as a "common plan," causing the (currently applicable) 5-acre threshold to be exceeded by many common activities. Under the current guidance, even with the 2-year deferral of the 1-acre threshold, there is great cause for concern that EPA could conclude that the second or third or fourth well in a field could constitute a common plan and then enforce against a producer for failing to file for a construction permit.

Because of these concerns, IPAA believes that EPA should reconsider its approach to stormwater construction permitting and E&P facilities. Recently, EPA deferred

until March 2005 the Phase II deadline for E&P facilities that disturb less than five acres of land area to obtain a stormwater permit. In the meantime, EPA will have an opportunity to consider whether there are alternative approaches that might be consistent with EPA's statutory authority and that would be consistent with the environmental impacts of construction of these facilities and minimizing the regulatory burden. IPAA believes this action is essential. However, the issue of common plan of development remains unclear in the recently issued Construction General Permit; failure to clarify it could lead to unintended regulation of these small facilities during the deferral period. Moreover, IPAA believes that EPA should revisit its current interpretation of the CWA to address whether it should be requiring E&P facilities of any size to be to obtain construction permits under subsection 402(p),given the clear exclusion in subsection 402(l).

Spill Prevention, Control, and Countermeasure Plans. The 1972 CWA required the EPA to develop regulations to address oil spill prevention and response. These SPCC Plans were required to be developed and implemented in 1973.

Following a major oil spill from an Ashland oil terminal, EPA proposed revisions to the SPCC rule on three occasions, in 1991, 1993, and 1997. A new SPCC rule was finalized and became effective August 16, 2002. This new rule raises serious issues for E&P facilities.

An initial issue that causes concern and confusion is what triggers the need to create an SPCC Plan. This decision must be based on whether an operation is a "facility" under the regulation and whether it could result in a release that would reach "navigable waters". Both elements must be met and both pose significant questions to the producer interpreting them.

Some sources indicate that EPA estimates that there are approximately 144,000 oil and natural gas E&P operations that would require SPCC Plans. However, there are approximately 876,000 producing oil and natural gas wells in the United States. Most producers believe that the SPCC regulation definition of a facility would capture most of these operations. Moreover, about 650,000 of these producing wells are marginal wells that are highly vulnerable to the impact of excessive regulatory costs. Many of these wells could be shutdown if meeting the new SPCC Plan requirements is too costly.

A similar fundamental issue relates to the interpretation of navigable waters. Making a judgment regarding whether an operation particularly one a remote area poses a threat to navigable waters has been consistently confounding. Over the past two decades different interpretations of the scope of the term have been complicated by different assessments by various EPA Regional offices. Further confusing the issue is the Supreme Court decision limiting the definition of the term in the *Solid Waste Agency of Northern Cook County* v. *United States Army Corps of Engineers* ("SWANCC") case. New guidance has been released regarding the implications of this decision on all Federal regulations and an Advanced Notice of Proposed Rulemaking has been published on the issue.

However, this guidance has not yet been systematically applied and the additional regulatory action is designed to produce specific regulations on the definition of wetlands. The outcome of these actions significantly affects the ability of producers to determine whether an SPCC Plan is required for their operation. Additionally, it is essential that all EPA Regional offices consistently apply these ultimate standards. Without some common understanding of the law, producers will be compelled to make judgments regarding the need for SPCC Plans that may be incorrect. They would either risk enforcement actions or incur unnecessary costs. Neither choice is appropriate.

Moving beyond these pivotal issues, a number of other significant issues with the new regulations must be either clarified or addressed.

• Past interpretations of the SPCC Plan requirements clearly allowed the operator to consider costs in the planning process. In the new regulation, EPA states, "Thus, we do not believe it is appropriate to allow an owner or operator to consider costs or economic impacts in any determination as to whether he can satisfy the secondary containment requirement." The consequence of this approach could be enormous for marginal wells. The costs of SPCC Plans are estimated to range from around $5,000 to $20,000 with most of this cost associated with secondary containment requirements. Clearly, these costs put the economic viability of marginal wells in jeopardy.

• One of the principal issues affecting these costs is a requirement in the new regulations for secondary containment at loading operations. A similar issue exists regarding secondary containment related to flow lines.

• EPA has concluded that produced water operations are not exempted as wastewater treatment. This decision would subject hundreds of thousands of produced

water tanks and vessels to secondary containment requirements when they contain only incidental amounts of oil.

• There is a significant issue regarding the availability of licensed professional engineers to certify new SPCC Plans.

EPA has extended the compliance deadlines in the regulations 18 months. IPAA supports this extension as an opportunity to revisit the key issues raised by the new regulation. It is important to emphasize that the environment is not at increased risk during this extension period. First, the SPCC Plan requirements in existence prior to the new regulations remain in place. Second, the responsibility to report and respond to spills is unaffected.

IPAA believes that there are three broad challenges that must be met. First, there is a compelling need to continue the process of developing an approach that is clearly understood by all domestic oil and natural gas producers particularly marginal well producers. Second, the process must yield a Plan that can be certified by licensed professional engineers. Third, the Plan must be affordable so that both the environmental objective of SPCC regulation can be met and domestic production is not inappropriately impaired.

IPAA believes that EPA should develop an approach to formulating SPCC Plans to meet the environmental risks of domestic oil and natural gas E&P. Such an approach should be focused on addressing those circumstances that have presented past problems. Such an approach would assure that the limited funds available particularly for marginal well producers are spent on areas where past experience has demonstrated a compelling call for action.

CONCLUSION

The CWA generates many regulations to improve water quality in the United States. But, it is essential that the CWA target issues where regulation is truly needed and that those regulations are cost effective. The applications of the stormwater construction permitting requirements and the new SPCC Plan regulations to domestic oil and natural gas E&P facilities do not meet this test. Moreover, they pose a significant risk to the development of new domestic oil and natural gas resources and the continued operation of existing production. In each case, EPA needs to reconsider its actions.

IPAA appreciates the opportunity to submit this testimony.

RESPONSE OF LEE FULLER TO ADDITIONAL QUESTION FROM SENATOR INHOFE

Question. What do you believe will be the impact on clean water protections if the oil industry lawsuit on SPCC plans results in a clarification of the definition of the waters of the United States?

Response. Given the significant implications of the definition of navigable waters, I do not believe that it will be resolved as a part of the oil industry lawsuit on SPCC Plans. Earthjustice and other groups have suggested that the Environmental Protection Agency (EPA) and the Department of Justice (DOJ) are conducting some type of secret negotiations to resolve the definitional question as a part of the SPCC Plan litigation, but I do not believe that this substantial issue will be resolved there for several reasons.

While the scope of navigable waters is essential to the determination of whether an SPCC Plan must be prepared, the issue of defining navigable waters after the Supreme Court decision in the SWANNC case is far broader and extremely complicated.

The navigable waters definition confusion has been a factor in the Clean Water Act since its initial enactment in 1972. At that time both Houses of Congress passed Clean Water bills in 1972 with navigable waters definitions similar to the definition used in the River and Harbor Act. However, the final conference agreement—and ultimately the Clean Water Act—created a new navigable waters definition. Under the Clean Water Act, "navigable waters" means the waters of the United States, including the territorial sea. However, there was little explicit report language or debate to define the scope of the term. Consequently, when the Clean Water Act was implemented and used an historic navigable waters definition, litigation (Calloway) challenged the definition and prevailed.

Since then, broad definitions of navigable waters have been used, but different interpretations are common and problematic. The SWANNC case precludes using migratory bird habitat as a basis for defining navigable waters but provides little guidance beyond that. What we really know is that the River and Harbor definition is too narrow and migratory bird habitat is too broad.

As a result, the Bush Administration has solicited input to the EPA and the Corps of Engineers to address the challenge of developing a consistent, legal navigable waters definition. That effort is ongoing. Meanwhile, several Federal court cases have been considered regarding post-SWANNC interpretations of navigable waters. These are winding their way through the appeals process.

Consequently, with all of these efforts and activities underway, it is implausible that the Bush Administration would try to resolve such a complicated and pervasive question in a settlement associated with the SPCC Plan litigation.

STATEMENT OF PROFESSOR RENA STEINZOR,[1] UNIVERSITY OF MARYLAND SCHOOL OF LAW

Mr. Chairman and members of the Committee, thank you for the opportunity to appear before you today on behalf of the Center for Progressive Regulation (CPR) to testify regarding the Environmental Protection Agency's (EPA) implementation of the Clean Water Act. Specifically, I plan to address EPA's enforcement record and water quality trading policies. CPR is an organization of academics specializing in the legal, economic, and scientific issues that surround health, safety, and environmental regulation. The Center seeks to provoke debate on how the government's authority and resources may best be used to preserve collective values and hold accountable those who ignore and trivialize them. We reject the idea that government's only function is to increase the economic efficiency of private markets. For further information, please see our web site at www.progressiveregulation.org.

This Committee deserves much credit for recognizing the importance of the topics you consider today. Deterrence-based enforcement lies at the core of an effective regulatory program designed to maintain and improve water quality in America. Yet congressional oversight of EPA's enforcement record has been sporadic and, without such oversight, it is difficult to hold the Agency accountable for keeping, so to speak, the environmental cop on the beat.

Similarly, trading of pollution "credits" or "allowances" is the most prominent market-based alternative to traditional regulation now under consideration by state, Federal, and even international governments. This hearing is one of the first to consider how best to use trading as an innovative approach to pollution control. I congratulate you for recognizing how crucial it is to get the design of these initial experiments right.

That said, I am afraid I have disappointing, even alarming, news on both fronts.

The core provisions of the Clean Water Act are under relentless attack by powerful members of regulated industries, raising the real possibility that the Administration will eliminate crucial protections, squandering the gains of the last two decades. I speak here of proposals to eliminate Federal controls on pollution for 50 to 60 percent of streams and 20 percent of wetlands. Unless and until the states pick up the slack left by EPA and the Army Corps of Engineer (Corps) abrupt departure from the field, these vast and irreplaceable natural resources could be polluted, drained, or filled in by industrial dischargers, real estate developers, and sewage treatment plants. The cumulative impact of these changes will produce grave erosions in water quality, not just in the affected streams and wetlands, but in the vast bodies of water into which they feed.

In another arena, as discussed in greater detail by my colleague Michael Lozeau, the Bush Administration is pursuing a rule on Total Maximum Daily Loads (TMDLs) that will make it impossible for states to establish enforceable limits for individual sources, potentially rendering that keystone program a dead letter as a practical matter. Ironically, these changes will undermine the state trading programs EPA claims to support because they would also eliminate any basis for allocating pollution allowances to individual sources.

Last but by no means least, there are ample signs that routine enforcement is at a lower ebb than it has been in a decade. The latest numbers indicate a precipitous decline in every measure of enforcement effectiveness from cases brought and penalties paid to staffing levels. But even those disconcerting statistics do not portend what may well be in store in the next several years as EPA's "brain trust" of experienced civil servants drains away. Because enforcement is such an important measure of the Agency's effectiveness, I will consider it first and then turn to Agency's trading policy.

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[1] I am grateful for the assistance of University of Maryland law students Katherine Baer and Jeff Gilberg to develop the research that forms the basis of this testimony.

ENFORCEMENT

Overall, enforcement of environmental laws has decreased dramatically since the Bush Administration came to power. For example, the number of EPA inspection and enforcement staff has fallen to its lowest level since establishment of the Agency, dropping by more than 12 percent since the Administration took office.[2] Additionally, fewer violators pay penalties and those who do pay are paying less. Violators have paid 64 percent less in fines for breaking environmental laws during the first 2 years of the Bush Administration than they did under the Clinton Administration.[3] The average civil penalty paid by polluters has dropped from $1.36 million to $605,455 and polluters pay 77 percent less for required supplemental environmental projects (SEPs) as part of settlement agreements.[4] Apparently this trend will only continue in his 2003 budget request the President sought to eliminate the positions of over 200 enforcement personnel.[5]

Despite the importance of preserving quality of the nation's surface waters, enforcement under the CWA parallels the general decline of environmental enforcement.[6] As a direct result, compliance rates are also declining. A recent report by EPA's Office of Enforcement and Compliance Assurance (OECA) on the performance of the major National Pollutant Discharge Elimination System (NPDES) permits reveals that enforcement activity for these dischargers has also declined from 1999 to 2001.[7] The percent of major NPDES permits in significant noncompliance increased from 16 percent to 24 percent from 1994 to 2001.[8] The number of inspections declined by 8 percent and the percent of facilities that were inspected declined by 6 percent.[9] There was a 50 percent decrease in the number of informal enforcement actions and a 45 percent decrease in formal actions.[10] Initiation of administrative complaint orders (ACOs) declined by 31 percent, and the initiation of administrative penalty order (APO) complaints declined by 28 percent.[11]

Yet even these statistics do not capture the implications of a downward spiral in this arena. My fellow CPR member scholar, Joel Mintz, a professor at Nova Southeastern University and the author of the seminal book Enforcement at the EPA,[12] is in the process of doing field research on the reasons why the Bush Administration has such a poor track record in this arena. Specifically, Professor Mintz interviewed about 20 enforcement officials at EPA and the Department of Justice (DOJ), both at their Washington D.C. headquarters offices and in some of the EPA regions. Based on those conversations, he has developed the following preliminary findings:

- Most EPA enforcement cases in the past 2 years have been directed at relatively small violations. The Agency has largely avoided the kinds of coordinated enforcement initiatives that proved so successful in the 1980's and 90's, under both Democratic and Republican Administrations. The non-Superfund enforcement that EPA has been doing is hampered by an extraordinary shortage of attorney resources at the Justice Department.
- Part of the reason for this shortage is that DOJ has assigned a very large number of attorneys to try enforcement cases against electric utilities based on the New Source Review provisions of the Clean Air Act. Even as those resources are expended, other components of the Administration have systematically undercut those cases through public statements and policy changes.
- EPA's Senior Executive Service (SES) personnel, who are the high level, career civil servants with the greatest collective expertise regarding EPA enforcement policies and techniques, are almost totally isolated within the Agency. Political appointees, especially in the Agency's regional offices, almost never consult SES people on important policy questions. As a result, their morale, and the morale of many who report to them, is very low.
- Many senior enforcement managers at the Agency have retired or plan to retire shortly. This trend is causing a severe loss of the expertise and institutional memory that are crucial to the success of vigorous EPA enforcement efforts.

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[2] Natural Resources Defense Council, Rewriting the Rules, Year-End Report 2002: The Bush Administration's Assault on the Environment. Jan.2003, p. 26.
[3] Id. at 27.
[4] Id.
[5] Id. at 26.
[6] Id. at 26.
[7] A Pilot Performance Analysis of Selected Components of the National Enforcement and Compliance Assistance Program, OECA EPA, Feb. 2003 [hereinafter OECA Analysis].
[8] Id. at 10.
[9] Id. at 17.
[10] Id.
[11] Id. at 18.
[12] Joel A. Mintz, Enforcement at the EPA: High States and Hard Choices (1995).

Clean Water Act enforcement is crucial to protecting public health; as just one example, as many as 13 percent of effluent violations for major sources emitting toxic pollutants exceed regulatory limits by more than 1,000 percent.[13] Additionally, enforcement spurs pollution prevention and treatment. Although the data are not complete, the percentage of pollutant reduction, elimination, and increased treatment that results from enforcement actions has increased as a percentage of the total enforcement actions taken.[14]

Given its importance, what accounts for these disturbing indications that EPA's enforcement program is, quite literally, falling apart? It has become very clear that this Administration is just not committed to deterrence-based enforcement of the nation's environmental laws. But what are the underlying reasons or justifications for that fact?

To be sure, the Nation faces many challenges at home and abroad and, in the absence of a fundamental change in fiscal policies (e.g., the determined pursuit of recent tax cuts despite a worsening economy), resources for domestic programs will continue to be very limited. But deterrence-based enforcement that is, the publicized prosecution of a few bad actors to create a disincentive for further law violations among a regulated industry as a whole is far more important when resources are tight because the only alternative is the far more resource-intensive practice of cajoling lawbreakers back into compliance.

Whatever the explanation, CPR urges this Committee to remain focused on enforcement as a leading topic for continued oversight of EPA.

TRADING

Overall Advantages and Principles.—Trading can be an effective, as well as efficient, management tool under conditions where reliable methods allow us to allocate allowances and track trades, as well as to detect unforeseen consequences. It also has two very significant political advantages.

First, trading has the potential to break political stalemate. The acid rain program established by the 1990 Clean Air Act Amendments broke a 13-year legislative stalemate regarding whether and how to control sulfur dioxide emissions from power plants. By making the fight about how to carve up the pie of total allowances, rather than whether to bake the pie in the first place, trading proved an extremely successful solution to what had become an intractable problem.

Second, regulated industrial sources perceived trading as lowering compliance costs to the point that they were affordable, especially in the Midwest, where the "big dirties" insisted they could not afford to comply with traditional pollution requirements. Everyone involved in the debate over environmental regulation recognizes the validity of industry preoccupation with costs, although it is also true that pre-implementation cost estimates are often exaggerated.

Trading works especially well when the pollutants at issue have a cumulative, long-term effect on the environment and do not pose immediate, short-term risks except in extraordinarily high concentrations. Expanding the use of trading to situations where it replaces regulatory requirements and produces localized pollution "hot spots" that harm human health and the environment will only serve to discredit it as a viable approach for environmental protection in the new millennium.

Water quality trading policy at the Federal and state levels should focus on control of nutrients by fostering exchanges between point and non-point sources. Water trading programs must:Include an appropriately low, and steadily declining, cap on total discharges;

- Rely on accurate methods for measuring emissions, awarding allowances, and reconciling the number of allocated allowances with subsequent trades;
- Prevent the formation of localized hot spots;
- Involve the public in the setting of caps and the operation of the program; and
- Rest on a foundation of enforceable commitments.

For a further discussion of these issues, please see Rena I. Steinzor, Toward Better Bubbles and Future Lives: A Progressive Response to the Conservative Agenda for Reforming Environmental Law, 32 Envtl. L. Rep. 11421 (Dec. 2002).

Analysis of EPA Guidance.—EPA's Water Trading Policy encourages states and tribes to develop water quality trading programs for a variety of constituents as a way to achieve water quality improvements at lowered costs. The Policy is premised on the basis that flexibility and economic efficiency will yield greater environmental benefits than traditional regulatory approaches. Water quality trading supposedly allows "one source to meet its regulatory obligations by using pollutant reductions

[13] OECA Analysis, supra note 10, at 6.
[14] Id. at 7.

created by another source that has lower pollution control costs."[15] Further, the Water Trading Policy restricts trading to a watershed or Total Maximum Daily Load (TMDL)-defined segment, although there are no stated limitations on the size of the watershed.[16] EPA specifically supports trading in situations, including the following, where trading:[17]

- Reduces the costs of TMDL implementation.
- Provides economic incentives for voluntary pollutant reductions.
- Reduces the cost of compliance with water quality based requirements.
- Offsets new or increased discharge to maintain support for designated uses.
- Creates ancillary benefits (e.g., wetland creation).

The Policy does not support trading to comply with existing technology-based effluent limitations.[18]

CONSISTENCY WITH THE CLEAN WATER ACT

Although the Policy states that trading is supposed to be consistent with the CWA and "aligned with and incorporated into core water quality programs" (e.g., watershed plans, water quality standards, the continuing planning process),[19] the CWA does not provide any statutory language to authorize trading.[20] In this sense, the CWA is in sharp contrast to the Clean Air Act, which broadly employs trading to reduce emissions as part of several programs. Significant CAA trading programs, however, were written into the Act as explicit statutory authority, including provisions for compliance monitoring and enforcement.[21] Because the Policy, like the creation of CAA offsets and SO_2 trading, attempts to create an inter-source trading program to achieve environmental gains by significantly changing the permitting system, these changes must occur at the legislative level, and not via guidance.

Congress also apparently recognizes the fact that trading is not currently authorized by the CWA as reflected by a previous attempt to add such authority to the CWA. The Water Quality Act of 1994 to amend the CWA included a number of provisions directed at controlling nonpoint source pollution.[22] Specifically, the bill included provisions for enforceable nonpoint source pollution plans and the study of trading programs.[23] At the bill's introduction sponsor Representative Mineta stated that a provision with a mechanism to authorize pollution trading would be added.[24] Ultimately the bill was not enacted, thus leaving the CWA without authorization for such water quality trading.

MECHANISMS FOR TRADING

The Water Trading Policy states that trading can legally be accomplished by incorporating trading into water quality management plans, the continuing planning process, watershed plans, water quality standards, TMDLs and NPDES permits.[25] Clearly, however, trading cannot be used by an NPDES permittee to achieve its primary technology-based effluent limits, as recognized in the Policy. However, the Policy also states that EPA will consider revising certain effluent limitations to allow such technology-based trading,[26] which would undermine the basic structure of the CWA that Congress created based upon point source effluent controls.[27]

NPDES permits, in addition to technology limits, must also include water quality-based limits to ensure that ambient water quality standards are not violated.[28] The Water Trading Policy identifies trading to meet water quality standards as an instance where trading may occur to offset an increased discharge. This sort of trade to meet water quality standards is inconsistent with the CWA and merely moves a pollution problem from one spot to another. Legally a point source cannot violate its water quality standards in exchange for a reduction elsewhere. Allowing a point

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[15] U.S. EPA, Water Trading Policy (January 13, 2003) at 1 (emphasis added), available at *www.epa.gov/owow/watershed/trading/finalpolicy2003.pdf* [hereinafter Water Trading Policy].
[16] Id. at 4.
[17] Id. at 3 and 6.Achieves early reductions and progress toward water quality standards pending development of TMDLS for impaired waters.
[18] Id. at 6.
[19] Id. at 4 and 6.
[20] Ann Powers, Reducing Nitrogen Pollution on Long Island Sound: Is There a Place for Pollutant Trading? 23 Colum. J. Envtl. L. 137, 168 (1998) (hereinafter referred to as Powers).
[21] Id. at 162.
[22] H.R. 3948, 103d Cong. (1994).
[23] H.R. 3948, 103d Cong. § 314 (1994).
[24] 140 Cong. Rec. 353 (1994)(remarks of Rep. Mineta).
[25] Water Trading Policy, supra note 15, at 6.
[26] Id.
[27] Sen. Rpt. 92–414, at 3675 (Oct. 28, 1971).
[28] 33 U.S.C. § 1311 (b)(1)(C).

source to buy credits instead of meeting water quality-based effluent limitations is also a poor policy choice because, by definition, it would allow pollutants to be discharged at levels that would be inconsistent with the designated uses protected by the water quality standards at the point of discharge.

Ironically, these aspects of the Water Trading Policy appear to contradict other provisions of the same document that define a pollution "credit" as reductions greater than those mandated by a regulatory requirement or established by a TMDL.[29] Unfortunately, this apparent contradiction can be reconciled if one remembers that TMDLs apply over a far greater area than the water quality standards that are incorporated into individual permits in the form of discharge limits. Even if EPA insists, as a practical matter, that trading comply with TMDLs, numerous plant-specific violations of Water Quality Standards could easily occur. Indeed, the new guidance would have little value to industry if it did not produce this outcome.

VALID TRADING OPPORTUNITIES: TMDLS FOR NUTRIENTS

EPA trading supporters probably dismiss the complaints of environmentalists on the basis that we have never seen trading that we like. This perception is wrong and allows staff to evade real problems with the Water Trading Policy using a heavily politicized rationale. In meeting after meeting with top EPA officials, national environmentalists repeatedly stated that, while trading to meet permit standards under an NPDES permit is troublesome, TMDLs[30] for nutrients provide optimal vehicles for trading to occur. Under TMDLs trading can be limited to circumstances in which there is adequate information on ambient water quality, sources of pollution, current loadings, and the amount of reduction needed to meet water quality standards (i.e. baseline loadings and a declining pollution cap), which are all provided by the TMDL program.

Unfortunately, the Policy allows pre-TMDL trading.[31] This tactic effectively attempts to circumvent the TMDL process and implement trading without a baseline or cap provided by a TMDL. Trading should be allowed to occur only when there is a TMDL in place and the trading program is consistent with TMDL allocations.

For trading to improve water quality, it must either be limited to point-point trading of reductions exceeding those already required under an NPDES permit (technology and water-quality-based standards) or be done to implement future reductions under a TMDL designed to meet water quality standards. Without a TMDL, EPA cannot allocate a reliable, environmentally sound baseline of initial "credits" are allocated. Trading without a reliable baseline and cap could result in environmental degradation, not environmental improvement. This result could occur, for example, if trading is allowed in a waterbody impaired by both point sources and nonpoint sources, where the point sources trade needed additional reductions with some nonpoint sources, yet other nonpoint sources increase their discharges more than the amount of the trade.

TRADABLE CONSTITUENTS: NUTRIENTS VERSUS TOXICS[32]

According to the Policy:

- Nutrients (TN, TP) and sediments including cross-pollutant trading for oxygen related pollutants are tradable as a matter of course.
- "Other" pollutants (e.g., NH_4, Se) can be traded on a case-by-case basis where prior approval is provided via an NPDES permit, TMDL, or as part of a state/tribal watershed plan or pilot trading project.
- No trading of "persistent bioaccumulative toxics" (PBTs) is supported unless it is part of a pilot project to obtain more information about PBT trading.

Nutrients provide an excellent opportunity for trading because they are a leading cause of water quality impairment and are largely attributable to nonpoint sources of pollution, which are inadequately controlled. However, because many states do not yet have water quality standards for phosphorus and nitrogen, trading to reduce these nutrients should only occur in a TMDL situation where there is good data about baseline conditions and a declining cap can be implemented. Cross-pollutant trading, on the other hand, is extremely complicated, because it makes tracking and monitoring difficult.

As for toxics, needless to say, one person's "pilot project," if replicated often enough, is another person's entire program. It is profoundly disappointing that EPA did not shut the door to these dangerous experiments not just with environmental

[29] Water Trading Policy, supra note 15, at 5.
[30] 33 U.S.C. § 1313(d)(3).
[31] Water Trading Policy, supra note 15, at 5.
[32] Id. at 4.

quality, but with public health. Trading must not apply to toxic pollutants because of the risk to human health aquatic life and the potential to create "hot spots." A hot spot is a localized concentration of pollutants in excess of water quality standards, which could result in fish kills and contamination, adverse human exposure, beach closures, and other impacts on aquatic life. The potential for creating hot spots is particularly troublesome in the case of toxics since the hot spots created today may not dissipate for decades or even centuries to come, but may instead persist in the sediment or increase in the food chain through bioaccumulation and biomagnification.

THE MERCURY EXAMPLE: NOT JUST WATER, BUT ALSO AIR

Mercury, for example, is recognized as a serious threat to human health that poses a threat to children and pregnant women who eat a range of fish.[33] Once mercury is deposited in water, fish absorb it. When humans eat the fish, their bodies take in the poison. At even very low levels, mercury poisoning in pregnant women damages their babies' central nervous system and causes heart, kidney and brain damage. Yet pregnant women are not the only ones at risk. After a yearlong study, a San Francisco physician announced in November 2002 that she had found symptoms of low-level mercury poisoning in dozens of her patients who consumed typical amounts of fish. Symptoms included hair loss, fatigue, depression, difficulty concentrating, and headaches.

In addition, the families of low-income, subsistence fishermen, who rely on daily catch for the protein portion of their diet, are at even greater risk. In 2001, 44 states issued public-health warnings that people should not eat mercury-contaminated fish from local waters. The Great Lakes, the Florida Everglades, and portions of the Chesapeake Bay are afflicted, along with hundreds of other lesser-known water bodies. Provoked by the very severe problems in the Great Lakes, a broad coalition of sportsmen, wildlife groups, and environmentalists has urged EPA to work toward a phase-out of all mercury pollution.

In nine states, fish advisories for mercury extend from inland lakes to coastal waters where tuna and other popular fish are caught. Tuna is the most consumed fish in the country, but because of concerns about mercury, many experts recommend that pregnant women limit themselves to two small cans per week. As one indication of the extent of this problem, the Senate Environment and Public Works Committee passed legislation in 2002 that bans mercury thermometers a mere drop in the bucket by comparison to the quantities of mercury that could be traded the Administration is now prepared to let industry pump into the environment.

EPA, in fact, has already funded one mercury pilot project in Sacramento.[34] How many more may be in the pipeline is anyone's guess.

To add insult to injury, the Administration's "Clear Skies" initiative would establish a complex credit-swapping scheme by which power plants will be entitled to trade mercury emissions. Most of the mercury that ends up in the water is released first into the air, from smokestacks where large utilities burn coal. The heavy metal particles in the smoke fall down into the water. The President's Clear Skies initiative, supposedly crafted to clean up the air more cheaply, would permit the creation of hot spots with vastly more mercury than the environment can sustain.

For 30 years, the standard approach has been to force plants to put scrubbers on their stacks so that the worst pollution will be removed before it goes into the air and EPA is overdue in promulgating Maximum Achievable Control Technology (MACT) for mercury. But the Bush Administration has decided that this straightforward solution is too costly for the utility industry. Clear Skies permits power plants to trade unused credits with plants up or downwind, even if mercury emissions land where fish are spawned. Worse, high sulfur coal, such as the coal used by the infamous "Big Dirties" in the Midwest, produces more mercury than low sulfur coal, used by the relatively clean power plants in the southwest. There is nothing in the Clear Skies proposal that prohibits trading of mercury credits generated by utilities in the arid southwestern deserts while the Great Lakes, the Everglades, and the Chesapeake Bay become more polluted.

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[33] USATODAY, USATODAY.com, Anita Manning, If you Eat a lot of Fish, you may Run a Health Risk, <http://usatoday.com/news/health/2002–11–04-fish–1acover—x.htm> (Nov. 4, 2002).

[34] U.S. EPA, Office of Water, Press Release: EPA Releases Innovative Approach to Cleaner Water 11 Pilot Projects Receive More than $800,000 in Funding, Jan. 13, 2003 <http://yosemite.epa.gov/opa/admpress.nsf/b1ab9f485b098972852562e7004dc686/7f1b0616de4dc2a285256cad006a60a7?OpenDocument> (last updated Jan. 13, 2003).

ANTIDEGRADATION

The Water Trading Policy also states that antidegradation review is not required as part of trading programs because EPA does not believe that trading will result in "lower water quality" where trading programs result in a no net increase of pollutants.[35] This claim assumes that trades are done by plants in close proximity. However, the Policy permits individual trades between sources at some distance from each other, as long as such sources are located within a watershed, raising the real possibility of a localized pollutant impact that would require an antidegradation analysis.

ENFORCEMENT AND MONITORING: THE POTENTIAL FOR WASTE AND FRAUD

Although the Water Trading Policy lists elements that should be used to ensure a successful state/tribal trading program, there is no requirement that states or tribes include any of these elements. This permissiveness is especially troubling with respect to provisions for enforcement or monitoring.[36] For example, the Water Trading Policy recommends that credits should be generated before or at the same time as they are used to comply with a limit, that standardized protocols should be used to account for the uncertainty associated with reduction of nonpoint source (NPS) pollution, and that there should be methods for determining compliance.[37] Trading programs, however, are subject to manipulation and fraud and thus demand stringent monitoring and enforcement mechanisms.[38] Failed programs to reduce air pollution in Los Angeles by the South Coast Air Quality Management District make this point clear.[39] In that case, stationary sources purchased credits, including from vehicle owners to take their old engines off the road, and without adequate monitoring the result was fraud and the creation of volatile organic compound hotspots in minority neighborhoods.[40] This real life and spectacular failure makes plain that all trades should be governed by a regulation, permit, or other enforceable mechanism with both governmental and citizen enforcement provisions.

The Policy offers some sound ideas such as consideration of compliance history to determine trading eligibility.[41] But these ideas must be transformed from notions into requirements for a trading program. Additionally, EPA oversight and approval for all trading programs is crucial, but it is a responsibility that is abdicated in the Policy, which states that "EPA does not believe that the development and implementation by states and tribes of trading programs consistent with the provisions of this policy necessarily warrant a higher level of scrutiny under these oversight authorities [NPDES and TMDL] than is appropriate for activities not involving trading."[42] On the contrary, continual EPA oversight of any state trading program is important both to the state agency and to those who use state waterbodies.

Compounding the potential for waste and fraud is the fact that the technology necessary to measure pollution reductions at non-point sources is still in it infancy. Consider, for example, a promise by agribusiness to erect a tree buffer to stop run-off from reaching the local water body. It is far more of an art than a science to predict how effective the buffer will be in stopping run-off, especially since meteorology, topology, and geology (e.g., soil type) play such a crucial role in those determinations.

For this reason, environmentalists have called for trading ratios that would compensate for problems in the methodology of measuring non-point emissions by requiring, for example, two credits from a non-point source to be traded for one credit from a point source. The EPA Policy, however, neither acknowledges these problems nor recommends this kind of solution.

PUBLIC INVOLVEMENT

Public participation is key to environmental programs, and similar to monitoring and enforcement, EPA makes references to public participation and access to infor-

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[35] Water Trading Policy, supra note 15, at 8.
[36] Id. at 9 and 10.
[37] Id.
[38] Rena Steinzor, Center for Progressive Regulation, Testimony before the House Subcommittee on Water Resources and the Environment of the U.S. House of Representatives regarding Water Quality Trading: An Innovative Approach to Achieving Water Quality Goals on a Watershed Basis. June 13, 2002 [hereinafter Steinzor Testimony].
[39] Richard Toshiyuki Drury, et al., Pollution Trading and Environmental Injustice: Los Angeles' Failed Experiment in Air Quality Policy, 9 Duke Envtl. L. & Pol'y. For. 231 (1999).
[40] Steinzor Testimony, supra note 38.
[41] Water Trading Policy, supra note 15, at 10.
[42] Id. at 11.

mation but without any specific requirements.[43] If the trade is part of an NPDES permit, the public will have a chance to comment only when the permit including a trading program is issued, but not for each trade. For trades that are not part of an NPDES permit, the opportunity for public involvement is unspecified and the Policy supports public participation and access to information and encourages states and tribes to make information available. There are no requirements, however, for such involvement.

The public must have a seat at the table when developing a trading program. All trading programs involve changes to components of a state water pollution program that require full public review (e.g., the TMDL, the NPDES program, the impaired waters list, etc). The public must be allowed to comment on and object to proposed trades, and should be given adequate information to track trades and their water quality effects. The Policy "encourages" entities to make trading information available to the public, but does not call for public comment on proposed trades or publicly available information on water quality impacts.

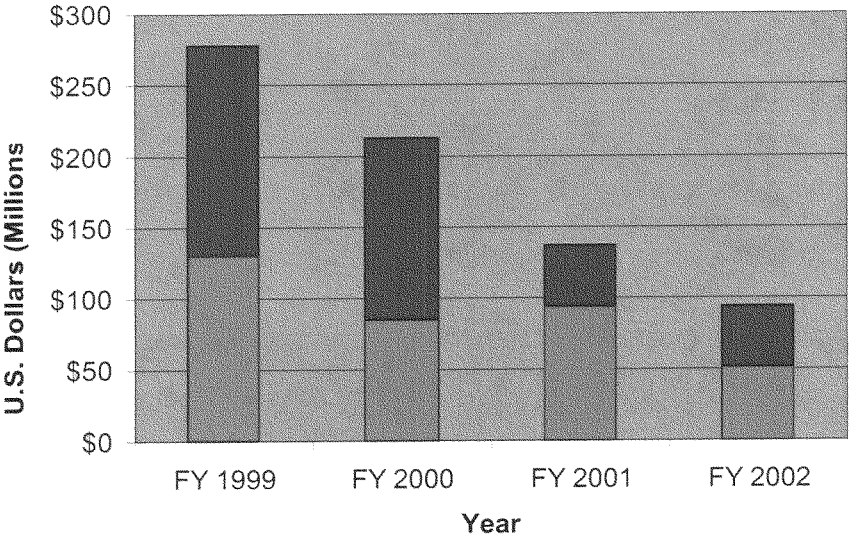
SUMMARY

Water quality trading offers promise in solving some of our remaining and intractable water quality problems. It is not, however, the "silver bullet" answer to solve all problems. Each trading program must be tailored to local conditions and based upon a legally defensible background that will support trading consistent with existing legislative authority. To achieve real gains, trading must focus on reducing nutrients in TMDL settings with an enforceable and declining cap against which credits can be measured.

ENVIRONMENTAL INTEGRITY PROJECT

PAYING LESS TO POLLUTE

The Decline of Environmental Enforcement at EPA Under the Bush Administration



January 2003

[43] Id. at 10.

EXECUTIVE SUMMARY

Shortly after taking the reins at the Environmental Protection Agency, the Bush Administration announced that it would cut the Agency's enforcement staff by 270 positions. The Administration has also made clear that it does not support the laws that EPA has been trying to enforce that prevent aging power plants, refineries, and other factories from increasing pollution when they expand. Predictably, these decisions have begun to take their toll on EPA's ability to persuade violators to agree to settle enforcement actions brought against them.

In the 2002 fiscal year—the first full year in which EPA was under the thumb of the Bush Administration and its allies in the energy lobby—the number of penalties recovered from polluters in civil cases that were settled in Federal court declined by half compared to the previous 3 year average. Defendants paid over $130 million, $84 million, and $94 million, respectively, in fiscal years 1999, 2000, and 2001 to settle judicial actions. In 2002, the U.S. Government was able to recover only $51 million in civil penalties. In addition, nearly two-thirds of penalties in the 2001 fiscal year (October 1, 2000 to September 30, 2001) came from settlements lodged before the Bush Administration took office on January 20, 2001. Declining penalties can be explained in part by the absence of large settlements with the kind of Fortune 1000 companies that were the subject of large enforcement actions in prior years.

In addition to paying penalties, companies are expected to return to compliance. EPA, however, will reduce penalties somewhat for those willing to undertake "supplemental environmental projects" or "SEPs" that bind companies to do work that is well beyond what is required to comply with the law. These SEPs offer substantial benefits to local communities by, for example, financing the purchase and preservation of wetlands and greenspace, underwriting the cost of fenceline monitoring and mobile asthma clinics, or supporting conversion of bus fleets to natural gas. The value of these SEPs declined from a 3-year average of $106 million between fiscal years 1999 and 2001, to only $43 million in 2002. Significantly, more than half of the SEPs obtained in the 2001 fiscal year originated from settlements lodged during the Clinton Administration.

Attachment A documents the current Administration's persistent campaign to cut back on enforcement staffing at EPA. By undercutting the enforcement program, the Administration has hamstrung EPA's power to effectively negotiate for environmental projects. The U.S. Senate has acted to restore full funding to EPA's enforcement program, which could help to reverse this trend, but has been stymied by the U.S. House of Representatives' push to restore only partial funding that would leave EPA with more than 100 fewer enforcement positions than it had when the current Administration took office. Meanwhile, the Bush Administration has made existing clean air laws even harder to enforce by weakening rules that require plants to obtain permits and install pollution controls. *See* Environmental Integrity Project (EIP), Turning the Clock Back on the Clean Air Act (Oct. 2002); EIP, Bright Lines or Loopholes? (Dec. 2002).

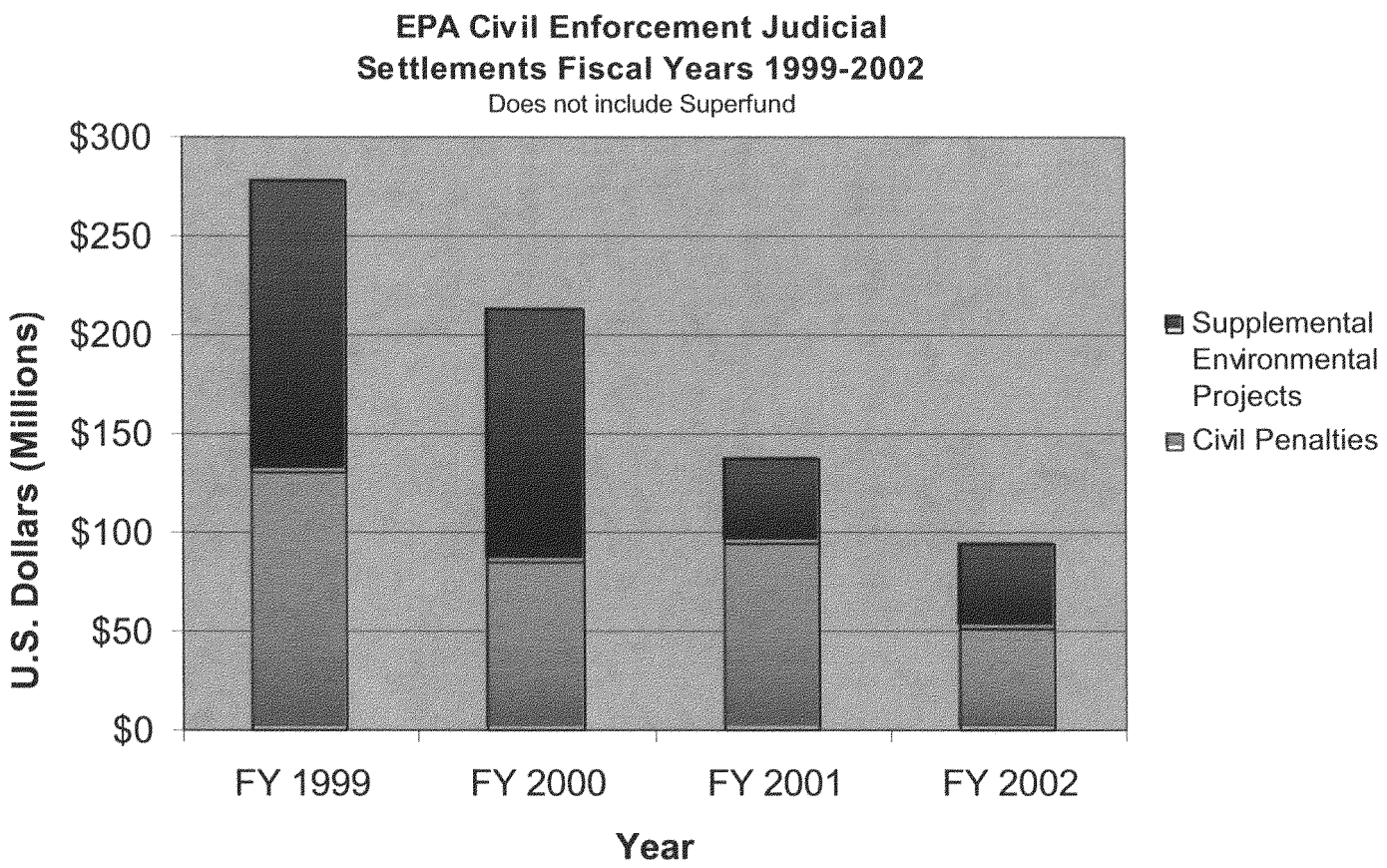
The attached analysis is based on a review of EPA cases lodged in Federal court over the past four fiscal years. Because all judicial settlements that resolve ongoing violations have to be published in the Federal Register for comment, the Environmental Integrity Project was able to obtain penalty and SEP data for almost all cases by searching through the LEXIS inventory of Federal Register notices. EIP compared the notices to EPA's announcements and press advisories on judicial cases and Department of Justice docket data obtained through a Freedom of Information Act request. The attached charts indicate "no value given" where the notice of lodging notes that there was a penalty or SEP obtained but does not state a specific amount. Entries are left completely blank in a handful of cases where the notices of lodging make no reference to penalties or SEPs whatsoever.

This analysis focuses on settlements lodged under the Clean Air Act, Clean Water Act, the Resource Conservation and Recovery Act, and several other statutes. According to Department of Justice data, a small number of cases brought in fiscal years 2001 and 2002 were not lodged. These settlements required only payment of a penalty, generally because the facility had closed or already returned to compliance. Because this data was not available from prior years, it was not included in this analysis. Similarly, enforcement actions establishing the government's environmental claims in bankruptcy cases were omitted, as recovery is uncertain under such circumstances.

The attached does not include Superfund cases, or a tally of natural resource damages under the Oil Pollution Act. It also does not include administrative actions, as that data is not yet available. Nevertheless, judicial cases typically account for more than two-thirds of penalties and supplemental environmental benefits recov-

ered in civil enforcement cases. The analysis is limited to civil enforcement cases, and does not include statistics from the criminal enforcement program, as these are not yet readily available.

No single statistic can capture the full range of benefits realized when environmental laws are enforced. Moreover, enforcement trends tend to be cyclical in nature, making it possible that the results for fiscal year 2002 are an aberration. Unfortunately, it is more likely that these numbers reflect an intentional effort to weaken enforcement efforts, indicating that the Bush Administration will do little to enforce environmental laws unless the public demands it.


EPA Civil Enforcement Judicial
Settlements Fiscal Years 1999-2002
Does not include Superfund
$300
$250
$200
$150
$100
$50
$0
U.S. Dollars (Millions)
FY 1999
FY 2000
FY 2001
FY 2002
Year
Supplemental Environmental Projects
Civil Penalties

RESPONSES OF RENA STEINZOR TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS

Question 1. Is the government somehow precluded from offering immunity under the criminal negligence section of the Clean Water Act?

Response. In a word, no. Like every other provisions of Federal criminal law, this section does not preclude the government from offering immunity to cooperating witnesses. The major rationale offered by those who wish to narrow the negligence provision is that it impedes government investigations of accidents because witnesses are too afraid to cooperate. Given the government's unimpeded authority to offer immunity, it is difficult to understand the basis for this argument.

Question 2. On page 3 of Mr. Hall's testimony, he outlines a scenario where the FAA provides for lenience when individuals self-disclose violations. He implies that the same does not exist at EPA or elsewhere in the Federal Government.

Attached are three key documents related to this point.

(1) First, EPA's 1994 memo on the Exercise of Investigative Discretion states that significant environmental harm and culpable conduct should be present before deciding to proceed with a criminal case; (2) Second, the US Department of Justice Spring 2000 Status Report on the Use of Immunity and Evidentiary Privileges to Encourage Voluntary Disclosure of Self-Discovered Regulatory Violations described the use of voluntary disclosure policies like the one you describe at FAA throughout the government. It cites the long standing 1991 policy of the Environment and Natural Resources Division that voluntary disclosure will lead to criminal prosecutorial leniency; (3) Third, the EPA December 1995 policy statement provides incentives such as elimination of the gravity component of civil penalties and not recommending cases for criminal prosecution in situations where voluntary disclosure has occurred.

Ms. Steinzor, it would appear that these documents as well as other similar documents found at the FBI and the Coast Guard offers the very protection Mr. Hall describes at the FAA. In addition, it seems that these documents would limit the use of criminal prosecutorial tools to a fairly limited universe of cases. Can you comment on this?

Response. Yes, these documents substantially limit the use of criminal prosecutorial tools to a very limited universe of cases. Not only is criminal prosecution reserved for the most significant and egregious violations, but leniency policies are in place that encourage companies to voluntarily disclose environmental violations so as to avoid criminal prosecution. Accordingly, very few cases are actually criminally prosecuted. The three documents mentioned in the above question specifically support this contention.

First, the EPA's 1994 memo on the Exercise of Investigative Discretion explicitly recognizes that there are "specific factors that distinguish cases meriting criminal investigation." (EPA 1994 memo, page 1) More specifically, the criminal case selection process is "guided by two general measures—significant environmental harm and culpable conduct." (EPA 1994 memo, page 3) Investigative discretion is based upon whether—and to what extent—these two general measures are present.

In deciding whether significant environmental harm has occurred, investigators will examine four factors. Specifically, investigators will consider: (a) the actual harm, either to the environment or human health, caused by the illegal discharge, release, or emission; (b) the threat of significant harm, either to the environment or human health, caused by the illegal discharge, release, or emission; (c) the failure to report the discharge, release, or emission; and, (d) the likelihood of the illegal conduct representing a trend or common attitude within the regulated community (EPA 1994 memo, page 4). The more of these factors that are present, the greater the chance that investigators will find that significant environmental harm has occurred.

In deciding whether culpable conduct has been exhibited, investigators will consider five factors. Specifically, investigators will determine whether: (a) there is a history of repeated violations; (b) the violation was a result of deliberate misconduct; (c) an attempt was made to conceal the misconduct; (d) monitoring or control equipment was tampered with; and, (e) the business operation was conducted with the proper permit, license, manifest, or other required documentation. (EPA 1994 memo, page 5) Again, if more than one of these factors are present, there is a greater chance that investigators will find that culpable conduct has been exhibited.

After considering the two general measures explained above, investigators will decide whether to proceed criminally. However, even if investigators elect to do so, it doesn't necessarily translate into a criminal prosecution. In fact, this exercise of investigative discretion is but a "critical precursor to the prosecutorial discretion later exercised by the Department of Justice. (EPA 1994 memo, page 3) In addition, when a case does not meet the specific criteria to proceed criminally, as is the case most

of the time, it is "systematically referred back to the Agency's civil enforcement office for appropriate administrative or civil judicial action." (EPA 1994 memo, page 3) Therefore, investigators neither arbitrarily nor recklessly decide whether to criminally proceed. Rather, two general measures and several accompanying factors are considered in order to reach an appropriate determination. Accordingly, the criminal enforcement authority entrusted is taken very seriously and is used only to prosecute the "most significant and egregious violators." (EPA 1994 memo, pages 2, 7)

Second, as explained in the US Department of Justice Spring 2000 Status Report on the Use of Immunity and Evidentiary Privileges to Encourage Voluntary Disclosure of Self-Discovered Regulatory Violations, many Federal agencies have supported and/or adopted leniency policies, which "reduce or waive penalties for violations that were voluntarily discovered, promptly disclosed, and quickly remedied." (DOJ 2000 Status Report, page 1) These policies—modeled on "discretionary leniency"—encourage disclosure while preserving Federal discretion to impose appropriate administrative and civil sanctions. (DOJ 2000 Status Report, pages 1–2) Therefore, companies are given an opportunity to escape criminal prosecution so long as they voluntarily disclose such violations and quickly remedy the problems that the violation caused.

Third, in its December 1995 policy statement, the EPA provides for such a leniency policy. More specifically, the EPA policy seeks to "enhance protection of human health and the environment [by encouraging voluntary disclosure of environmental violations]." (EPA 1995 policy statement, page 66706) In exchange for such disclosure, the EPA offers the incentives of "eliminating or substantially reducing the gravity component of civil penalties and not recommending cases for criminal prosecution." (EPA 1995 policy statement, page 66706) Therefore, the EPA itself offers violators an opportunity to avoid criminal prosecution by voluntary disclosing the details of the violation.

As Robin Greenwald alluded to in her testimony, two former chiefs of the Department of Justice, Environmental Crimes Section, Ronald Sarachan and Steven Solow, undertook a statistical analysis illustrating that of the 1,436 environmental crimes prosecuted from 1987 to 1997, only 86, or approximately 6 percent, were negligence cases. Clearly, the EPA and DOJ have taken very seriously their authority to criminally investigate and prosecute environmental violations. Furthermore, as my testimony reflects, an environmental violation that was merely an accident has never been criminally prosecuted. Rather, as the EPA sets forth, the criminal enforcement authority is used only to prosecute the "most significant and egregious violators." (EPA 1994 memo, pages 2, 7)

Question 3. Section 309 of the Clean Water Act has been used in a number of prosecutions involving both environmental damage and personal injury. Can you describe a few cases other than the Hanousek and the Hong cases that have resulted in successful enforcement actions against violators?

Response. There are three other cases that immediately come to mind as examples of successful enforcement actions under Section 309 of the Clean Water Act. First, as noted by Ms. Greenwald's testimony, the *Exxon Valdez* oil spill was perhaps "one of the worst environmental catastrophes in this country." In that case, the specific negligence was Exxon's decision to allow a known alcoholic to "navigate the barge in the Prince William Sound." The combination of "significant environmental harm" and "culpable conduct" in the Exxon spill made this case a clear Section 309 criminal enforcement.

Second, also noted by Ms. Greenwald's testimony, the Colonial Pipeline spill in the Reedy River is another example of a significant environmental harm resulting from the negligence of an operator. In particular, there was a "tremendous loss" of nearly one million gallons of petroleum products caused by the "'negligent' failure to repair a known weak spot in the pipeline." In fact, Colonial knew specifically of the weak spot yet elected to take the risk and move the petroleum product anyway.

As Greenwald asserts, if Section 309 were amended to include the proposed statutory language, neither the *Exxon Valdez* nor Colonial Pipeline cases could have been prosecuted for Clean water Act negligence because "no one was injured nor put at risk of death or serious bodily injury." But, both of these cases were deserving of criminal prosecution due to the "significant environmental harm" and "culpable conduct" involved.

A third example of successful Section 309 criminal enforcement is the tragic case of the Olympic Pipeline spill. In June 1999, a rupture in the Olympic petroleum pipeline resulted in a spill of approximately 236,000 gallons of gasoline into Hannah Creek and Whatcom Creek. (http://www.usdoj.gov/usao/waw/text—version/press—room?2003/jun/olympic.htm). In addition, the gasoline ignited, resulting in the deaths of three teenagers (http://www.usdoj.gov/usao/waw/text—version/press—

room?2003/jun/olympic.htm). This example differs from the previous two in that it illustrates the ability of the EPA and DOJ to investigate and prosecute cases that did cause death or serious bodily injury. In other words, the proposed amendment to Section 309 is not only too restrictive, but it is also unnecessary. As the case of Olympic Pipeline demonstrates, both the EPA and DOJ are already well aware that whenever death or serious bodily injury occurs as a result of an environmental violation, criminal prosecution is appropriately preferred.

Question 4. It is my understanding that the Department of Justice has applied a simple negligence standard to criminal environmental cases for an extended period of time. Can you comment on this?

Response. As the testimony of Robin Greenwald reflects, the Department of justice has applied a simple negligence standard to criminal environmental cases since 1987, when Congress amended the Clean Water Act in 1987 to add Section 309. However, defendants have never been prosecuted for what was a simple "accident", as the oil industry suggests. In fact, neither the Hanousek and Hong decisions represent a departure from that practice. Both cases, as described by Ms. Greenwald, evidence the practice of only criminally prosecuting "catastrophic" environmental violations that were caused by an operator's failure to exercise the care that a reasonable person would have taken under similar circumstances; the defendants in both cases acted with "utter disregard" for the environment. Accordingly, both decisions "represent the need for Section 309 to punish egregious behavior." Furthermore, as the statistical research of Ronald Sarachan and Steven Solow illustrates, only 6 percent of the criminal environmental prosecutions between 1987 and 1997 were negligence cases. In addition, as I testified, there has never been a case of an environmental violation prosecuted for which there was merely an "accident." Therefore, Section 309 has functioned in the very manner for which it was created—to only hold the most significant and egregious violators criminally responsible.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT

January 12, 1994

MEMORANDUM

SUBJECT: The Exercise of Investigative Discretion

FROM: Earl E. Devaney, Director
Office of Criminal Enforcement

TO: All EPA Employees Working in or in Support of the Criminal Enforcement Program

I. Introduction

As EPA's criminal enforcement program enters its second decade and embarks on a period of unprecedented growth, this guidance establishes the principles that will guide the exercise of investigative discretion by EPA Special Agents. This guidance combines articulations of Congressional intent underlying the environmental criminal provisions with the Office of Criminal Enforcement's (OCE) experience operating under EPA's existing criminal case-screening criteria.[1]

In an effort to maximize our limited criminal resources, this guidance sets out the specific factors that distinguish cases meriting criminal investigation from those more appropriately pursued under administrative or civil judicial authorities.[2]

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[1] This guidance incorporates by reference the policy document entitled Regional Enforcement Management: Enhanced Regional Case Screening (December 3, 1990).

[2] This memorandum is intended only as internal guidance to EPA. It is not intended to, does not, and may not be relied upon to, create a right or benefit, substantive or procedural, enforceable at law by a party to litigation with the United States, nor does this guidance in any way limit the lawful enforcement prerogatives, including administrative or civil enforcement actions, of the Department of Justice and the Environmental Protection Agency.

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Indeed, the Office of Criminal Enforcement has an obligation to the American public, to our colleagues throughout EPA, the regulated community, Congress, and the media to instill confidence that EPA's criminal program has the proper mechanisms in place to ensure the discriminate use of the powerful law enforcement authority entrusted to us.

II. Legislative Intent Regarding Case Selection

The criminal provisions of the environmental laws are the most powerful enforcement tools available to EPA. Congressional intent underlying the environmental criminal provisions is unequivocal: criminal enforcement authority should target the most significant and egregious violators.

The Pollution Prosecution Act of 1990 recognized the importance of a strong national environmental criminal enforcement program and mandates additional resources necessary for the criminal program to fulfill its statutory mission. The sponsors of the Act recognized that EPA had long been in the posture of reacting to serious violations only after harm was done, primarily due to limited resources. Senator Joseph I. Lieberman (Conn.), one of the co-sponsors of the Act, explained that as a result of limited resources, "... few cases are the product of reasoned or targeted focus on suspected wrongdoing." He also expressed his hope that with the Act's provision of additional Special Agents, "... EPA would be able to bring cases that would have greater deterrent value than those currently being brought."

Further illustrative of Congressional intent that the most serious of violations should be addressed by criminal enforcement authority is the legislative history concerning the enhanced criminal provisions of RCRA:

> [The criminal provisions were] intended to prevent abuses of the permit system by those who obtain and then knowingly disregard them. It [RCRA sec. 3008(d)] is not aimed at punishing minor or technical variations from permit regulations or conditions if the facility operator is acting responsibly. The Department of Justice has exercised its prosecutorial discretion responsibly under similar provisions in other statutes and the conferees assume that, in light of the upgrading of the penalties from misdemeanor to felony, similar care will be used in deciding when a particular permit violation may warrant criminal prosecution under this Act. H.R. Conf. Rep. No. 1444, 96th Cong., 2d Sess. 37, reprinted in 1980 U.S. Code Cong. & Admin. News 5036.

While EPA has doubled its Special Agent corps since passage of the Pollution Prosecution Act, and has achieved a presence in nearly all federal judicial districts, it is unlikely that OCE will ever be large enough in size to fully defeat the ever-expanding universe of environmental crime. Rather, OCE must maximize its presence and impact through discerning case-selection, and then proceed with investigations that advance EPA's overall goal of regulatory compliance and punishing criminal wrongdoing.

III. Case Selection Process[3]

The case selection process is designed to identify misconduct worthy of criminal investigation. The case selection process is not an effort to establish legal sufficiency for prosecution. Rather, the process by which potential cases are analyzed under the case selection criteria will serve as an affirmative indication that OCE has purposefully directed its investigative resources toward deserving cases.

This is not to suggest that all cases meeting the case selection criteria will proceed to prosecution. Indeed, the exercise of investigative discretion must be clearly distinguished from the exercise of prosecutorial discretion. The employment of OCE's investigative discretion to dedicate its investigative authority is, however, a critical precursor to the prosecutorial discretion later exercised by the Department of Justice.[4]

At the conclusion of the case selection process, OCE should be able to articulate the basis of its decision to pursue a criminal investigation, based on the case selection criteria. Conversely, cases that do not ultimately meet the criteria to proceed criminally, should be systematically referred back to the Agency's civil enforcement office for appropriate administrative or civil judicial action, or to a state or local prosecutor.

IV. Case Selection Criteria

The criminal case selection process will be guided by two general measures - significant environmental harm and culpable conduct.

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[3] The case selection process must not be confused with the Regional Case Screening Process. The relationship between the Regional Case Screening Process and case selection are discussed further at "VI.", below.

[4] Exercise of this prosecutorial discretion in all criminal cases is governed by the principles set forth the Department of Justice's Principles of Federal Prosecution.

A. Significant Environmental Harm

The measure of significant environmental harm should be broadly construed to include the presence of actual harm, as well as the threat of significant harm, to the environment or human health. The following factors serve as indicators that a potential case will meet the measure of significant environmental harm.

Factor 1. Actual harm will be demonstrated by an illegal discharge, release or emission that has an identifiable and significant harmful impact on human health or the environment. This measure will generally be self-evident at the time of case selection.[5]

Factor 2. The threat of significant harm to the environment or human health may be demonstrated by an actual or threatened discharge, release or emission. This factor may not be as readily evident, and must be assessed in light of all the facts available at the time of case selection.

Factor 3. Failure to report an actual discharge, release or emission within the context of Factors 1 or 2 will serve as an additional factor favoring criminal investigation. While the failure to report, alone, may be a criminal violation, our investigative resources should generally be targeted toward those cases in which the failure to report is coupled with actual or threatened environmental harm.

Factor 4. When certain illegal conduct appears to represent a trend or common attitude within the regulated community, criminal investigation may provide a significant deterrent effect incommensurate with its singular environmental impact. While the single violation being considered may have a relatively insignificant impact on human health or the environment, such violations, if multiplied by the numbers in a cross-section of the regulated community, would result in significant environmental harm.

B. Culpable Conduct

The measure of culpable conduct is not necessarily an assessment of criminal intent, particularly since criminal intent will not always be readily evident at the time of case selection. Culpable conduct, however, may be indicated at the time of case selection by several factors.

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[5] When this factor involves a fact situation in which the risk of harm is so great, so immediate and/or irremediable, OCE will always cooperate and coordinate with EPA's civil enforcement authorities to seek appropriate injunctive or remedial action.

Factor 1. History of repeated violations.

While a history of repeated violations is not a prerequisite to a criminal investigation, a potential target's compliance record should always be carefully examined. When repeated enforcement activities or actions, whether by EPA, or other federal, state and local enforcement authorities, have failed to bring a violator into compliance, criminal investigation may be warranted. Clearly, a history of repeated violations will enhance the government's capacity to prove that a violator was aware of environmental regulatory requirements, had actual notice of violations and then acted in deliberate disregard of those requirements.

Factor 2. Deliberate misconduct resulting in violation.

Although the environmental statutes do not require proof of specific intent, evidence, either direct or circumstantial, that a violation was deliberate will be a major factor indicating that criminal investigation is warranted.

Factor 3. Concealment of misconduct or falsification of required records.

In the arena of self-reporting, EPA must be able to rely on data received from the regulated community. If submitted data are false, EPA is prevented from effectively carrying out its mandate. Accordingly, conduct indicating the falsification of data will always serve as the basis for serious consideration to proceed with a criminal investigation.

Factor 4. Tampering with monitoring or control equipment.

The overt act of tampering with monitoring or control equipment leads to the certain production of false data that appears to be otherwise accurate. The consequent submission of false data threatens the basic integrity of EPA's data and, in turn, the scientific validity of EPA's regulatory decisions. Such an assault on the regulatory infrastructure calls for the enforcement leverage of criminal investigation.

Factor 5. Business operation of pollution-related activities without a permit, license, manifest or other required documentation.

Many of the laws and regulations within EPA's jurisdiction focus on inherently dangerous and strictly regulated business operations. EPA's criminal enforcement resources should clearly pursue those violators who choose to ignore environmental regulatory requirements altogether and operate completely outside of EPA's regulatory scheme.

V. Additional Considerations when Investigating Corporations

While the factors under measures IV. A and B, above, apply equally to both individual and corporate targets, several additional considerations should be taken into account when the potential target is a corporation.

In a criminal environmental investigation, OCE should always investigate individual employees and their corporate[6] employers who may be culpable. A corporation is, by law, responsible for the criminal act of its officers and employees who act within the scope of their employment and in furtherance of the purposes of the corporation. Whether the corporate officer or employee personally commits the act, or directs, aids, or counsels other employees to do so is inconsequential to the issue of corporate culpability.

Corporate culpability may also be indicated when a company performs an environmental compliance or management audit, and then knowingly fails to promptly remedy the noncompliance and correct any harm done.[7] On the other hand, EPA policy strongly encourages self-monitoring, self-disclosure, and self-correction.[8] When self-auditing has been conducted (followed up by prompt remediation of the noncompliance and any resulting harm) and full, complete disclosure has occurred, the company's constructive activities should be considered as mitigating factors in EPA's exercise of investigative discretion. Therefore, a violation that is voluntarily revealed and fully and promptly remedied as part of a corporation's systematic and comprehensive self-evaluation program generally will not be a candidate for the expenditure of scarce criminal investigative resources.

VI. Other Case Selection Considerations

EPA has a full range of enforcement tools available - administrative, civil-judicial, and criminal. There is universal consensus that less flagrant violations with lesser environmental consequences should be addressed through administrative or civil monetary penalties and remedial orders, while the most serious environmental violations ought to be investigated criminally. The challenge in practice is to correctly distinguish the latter cases from the former.

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[6] The term "corporate" or "corporation", as used in this guidance, describes any business entity, whether legally incorporated or not.

[7] In cases of self-auditing and/or voluntary disclosure, the exercise of prosecutorial discretion is addressed in the Department of Justice policy document entitled "Factors in Decisions on Criminal Prosecutions for Environmental Violations in the Context of Significant Voluntary Compliance or Disclosure Efforts by the Violator" (July 1, 1991).

[8] See EPA's policy on environmental audits, published at 51 Fed. Reg. 25004 (July 9, 1986)

The case-selection factors described in this guidance should provide the foundation for the communication process that necessarily follows in the Regional Case Screening Process. This guidance envisions application of the case-selection factors first, to be followed by the recurring scrutiny of cases during the Regional Case Screening process.

The fundamental purpose of Regional Case Screening is to consider criminal enforcement in the greater context of all available EPA enforcement and environmental response options, to do so early (at the time of each case opening) before extensive resources have been expended, and to identify, prioritize, and target the most egregious cases. Regional Case Screening is designed to be an ongoing process in which enforcement cases are periodically reviewed to assess not only the evidentiary developments, but should also evaluate the clarity of the legal and regulatory authorities upon which a given case is being developed.[9]

In order to achieve the objectives of case screening, all cases originating within the OCE must be presented fully and fairly to the appropriate Regional program managers. Thorough analysis of a case using the case-selection factors will prepare OCE for a well-reasoned presentation in the Regional Case Screening process. Faithful adherence to the OCE case-selection process and active participation in the Regional Case Screening Process will serve to eliminate potential disparities between Agency program goals and priorities and OCE's undertaking of criminal investigations.

Full and effective implementation of these processes will achieve two important results: it will ensure that OCE's investigative resources are being directed properly and expended efficiently, and it will foreclose assertions that EPA's criminal program is imposing its powerful sanctions indiscriminately.

VII. Conclusion

The manner in which we govern ourselves in the use of EPA's most powerful enforcement tool is critical to the effective and reliable performance of our responsibilities, and will shape the reputation of this program for years to come. We must conduct ourselves in keeping with these principles which ensure the prudent and proper execution of the powerful law enforcement authorities entrusted to us.

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[9] The legal structure upon which a criminal case is built - e.g., statutory, regulatory, case law, preamble language and interpretative letters - must also be analyzed in terms of Agency enforcement practice under these authorities. Thorough discussion of this issue is beyond the scope of this document, but generally, when the clarity of the underlying legal authority is in dispute, the more appropriate vehicle resolution lies, most often, in a civil or administrative setting.

U.S. Department of Justice

Washington, DC 20530-0001

950 Pennsylvania Avenue, N.W.

Status Report on Use of Immunity and Evidentiary Privileges to Encourage Voluntary Disclosure of Self-Discovered Regulatory Violations

Spring 2000

I. BACKGROUND

Federal agencies and prosecutors cannot, with their available resources, detect every violation of federal environmental, antitrust, workplace safety, civil rights, or other laws and regulations. In recent years, a number of federal agencies, prosecutors, and even Congress itself, have considered ways to secure the cooperation of regulated entities in voluntarily detecting or disclosing noncompliance. This issue has become increasingly important lately, as support for such measures by regulated industries has grown. While the Justice Department fully supports efforts to encourage voluntary disclosure of legal violations, for the reasons discussed below, we have strongly and consistently opposed any proposals that would undermine the ability of federal agencies or the Department to prosecute offenders civilly or criminally where such prosecution is warranted notwithstanding their voluntary disclosure.

There are, in general, three types of proposals that have emerged to encourage voluntary disclosure of noncompliance with federal laws and regulations.[1] First, some federal agencies have proposed that companies that audit their operations for compliance, voluntarily discover violations and promptly report them should be granted full or partial **immunity** from civil or criminal prosecution. As one might expect, the regulated industries strongly support these immunity programs – whether disclosure results in full immunity from all civil and criminal action or some form of limited immunity from civil actions. Second, Congress and federal agencies have considered whether to create evidentiary **privileges** and **FOIA exemptions** that would protect any information voluntarily discovered through audit procedures and promptly disclosed to the relevant federal agency, rendering this information inadmissible in civil or administrative proceedings. FOIA exemptions would prohibit the agency from disclosing that information to the public. Third, some federal agencies have adopted **leniency** policies that reduce or waive penalties for violations that were voluntarily discovered, promptly disclosed and quickly remedied.

In the past, the Department has supported the third type of proposal — leniency policies. These policies encourage regulated entities to voluntarily disclose any violations of federal law they discover,

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[1] This memorandum concerns legislative and agency proposals that grant immunity and evidentiary privileges to encourage regulated entities to create audit mechanisms for the purpose of discovering violations of law. As a result, it does not address the array of proposals that grant immunity or establish evidentiary privileges for other purposes. *See, e.g.*, H.R. 391 (106th Cong.), Small Business Paperwork Reduction Act Amendments of 1999 (granting small businesses immunity from civil penalties for their first "good faith" violation of federal regulatory reporting laws). The Department has opposed bills in this context as well on the grounds that such automatic "free passes" undercut the utility of the federal laws, reduce accountability of regulated entities, and potentially endanger the public.

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Washington, DC 20530-0001

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but leave the federal agency or the Department of Justice with discretion to impose administrative and civil sanctions when it is appropriate to do so. Indeed, as discussed more fully below, long-standing Department policies in the areas of Tax, Antitrust, Environment and Defense Procurement Fraud provide significant incentives for voluntary disclosure of violations without compromising the government's discretion to enforce in appropriate cases, as would be the case with privilege and immunity laws and regulations. For several reasons, however, the Department has grave concerns regarding grants of immunity from prosecution, the creation of evidentiary privileges, or the creation of FOIA exemptions with respect to voluntary disclosures of noncompliance. These reasons include:

- Privilege and immunity laws conceal information from government agencies and the public about violations of the law. This runs counter to the Department's emphasis on disclosure to the public of issues of public interest and concern. Such proposals are also contrary to the public policy of openness and accountability that underlie environmental and other laws.

- An evidentiary privilege would have the effect of creating a corporate Fifth Amendment privilege. That would impede law enforcement by raising new legal issues that would have to be extensively litigated.

- Evidentiary privileges are disfavored in federal law. Because they are in "derogation of the search for truth" they are not "lightly created." U.S. v. Nixon, 418 U.S. 683, 710 (1974).

- Experience and studies confirm that one of the strongest incentives to perform audits and to correct problems is the existence of a strong enforcement program. Proponents of privilege and immunity protections for violators claim that their proposals will yield a higher level of compliance. Yet the opposite may well result. As recent commentators have noted, privilege and immunity laws will have the effect of lowering the probability of liability and therefore corporate agents will "have less incentive to refrain from misconduct." Jennifer Arlen & Reinier Kraakman, "Controlling Corporate Misconduct: An Analysis of Corporate Liability," 72 N.Y.U.L. Rev. 687, 743 (1997).

- The creation of new FOIA exemptions keeps information away from the public. Such secrecy is inconsistent with the longstanding and well-settled view that openness in government enables the public to make choices and makes government more accountable.

II. DISCUSSION

This memorandum samples the positions of Justice Department components and of other federal agencies on audit privileges and immunities. The memorandum then identifies those elements of a model voluntary disclosure policy – modeled on discretionary leniency – that we believe are acceptable from the federal law enforcement perspective. Finally, this memorandum recommends that the Department develop and adopt a model voluntary disclosure policy for use by other federal agencies.

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A. Sampling of Immunity Programs in the Federal System

Nearly every federal agency and most of the components within the Justice Department have declined to grant full immunity from prosecution to companies that voluntarily disclose violations of the law. Instead, they have opted to grant regulated entities some form of prosecutorial leniency in exchange for their cooperation. Most of these leniency programs operate similarly: they require voluntary discovery, prompt disclosure, the full cooperation of the disclosing party, the adoption of preventive measures and restitution for the violation. The sole exception is the Antitrust Division's "Corporate Leniency Policy," which grants full immunity from prosecution for the first qualifying company to disclose evidence of anti-competitive activity. That policy, however, operates in the context of crimes that by definition require the concerted efforts of multiple actors, such that an amnesty program that induces co-conspirators to turn on one another makes sense.

Within the Justice Department

Tax Division. In § 4.01 of its Criminal Tax Manual, the Tax Division sets forth its "informal" policy regarding voluntary disclosure: Criminal prosecution will not normally be recommended if the taxpayer: (i) informed the IRS of the legal violation; (ii) had only "legal source" income; (iii) made the disclosure prior to being contacted by the IRS; (iv) filed a correct tax return and fully cooperated with the IRS; and (v) paid fully the amounts due. The Division nevertheless reserves the right to prosecute even those offenders who meet these five criteria if other circumstances warrant prosecution.

Antitrust Division. Since August 1993, the Antitrust Division has had in place its "expanded" Corporate Leniency Policy. Under this policy, a company may "apply" for amnesty from prosecution and is likely to receive amnesty if the company: (i) is the first member of a secret cartel to come forward and does so before an investigation begins; (ii) is not the leader or instigator of the illegal activity; (iii) terminates its participation in the illegal activity; (iv) makes restitution "where possible" to "injured parties"; and (v) fully cooperates with the Department's investigation. Companies who come forward first, but after an investigation begins, are still eligible for amnesty, but only if they are the first to cooperate and if the Department's ongoing investigation has not yet amassed sufficient evidence to prosecute them. Companies that do not come forward first will not receive amnesty, but may receive some leniency. Thus, the policy works to encourage companies to be the first to turn in their co-conspirators.

Environment and Natural Resources Division. In a 1991 memorandum, the Environment and Natural Resources Division (ENRD) announced that companies that disclose violations of environmental laws pursuant to internal audits will receive some criminal prosecutorial leniency if the disclosure is voluntary (*i.e.*, not in response to an ongoing investigation), if the company cooperates fully with the Department, if the company initiates preventive measures to ensure compliance, and if the company takes remedial action to cure the harm caused by the violation, among other measures. A memorandum summarizing this policy was recently prepared for inclusion in the U.S. Attorneys Manual. In addition, ENRD has worked closely with the Environmental Protection Agency (EPA) in the formulation of the Agency's leniency policy, which is described below.

Other Divisions. The Civil Rights and Civil Divisions do not have any formal policies on the

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grant of immunity, but have generally advised other agencies not to grant immunity (as is detailed below).

Outside the Justice Department

EPA. In its recently revised audit policy and small business compliance policy, the EPA agrees to waive all (or, in some cases, 75%) of the "gravity-based" (*i.e.*, punitive) component of civil penalties for those companies that voluntarily discover and promptly disclose violations of environmental laws, if the companies also agree to take remedial measures and meet certain other criteria. The audit policy also provides that the Agency will decline to recommend for criminal prosecution a company that voluntarily discloses a violation if certain other criteria are met. These policies complement the ENRD's 1991 criminal prosecutorial discretion guidance memorandum.

OSHA. In July 2000, OSHA issued a voluntary self-audit policy that mitigates civil penalties up to 25% for businesses that voluntarily disclose and promptly correct hazardous conditions in the workplace pursuant to systematic, documented and objective self-audits. *See* 65 Fed. Reg. 46,498 (July 28, 2000).

IRS. The IRS' Manual adopts the same policy toward referrals for prosecution as is adopted by the Tax Division: prosecution will not generally be recommended for persons who disclose their violations promptly and voluntarily, cooperate with the IRS, and pay all back taxes (or agree to a schedule of payment).

Department of Defense. The DOD's "Voluntary Disclosure Program" allows government contractors to obtain some leniency from the DOD and, in turn, the Justice Department, if they voluntarily and promptly disclose any improprieties, fully cooperate with the DOD, and make full restitution for their fraud.

Bureau of Export Administration. The BXA has promulgated regulations granting leniency to companies that voluntarily disclose any violations of the Export Administration's regulations. *See* 15 C.F.R. § 764.5.

Office of Defense Trade Controls. The ODTC's regulations allow companies that may have violated the Arms Export Control Act to receive the possibility of leniency for voluntarily disclosing any potential violations to the ODTC. *See* 22 CFR § 127.12.

B. Sampling of Privilege Programs in the Federal System

The use of evidentiary privileges and related FOIA exemptions is not widespread as a means of encouraging regulated entities to voluntarily disclose information to the government. This is hardly surprising. Privileges grant less protection to regulated entities than immunity because privileges do not limit prosecution. At the same time, privileges impose greater burdens because they are likely to spawn extensive litigation concerning the scope and applicability of the privilege.

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Federal Reserve System. Lenders who perform "self-tests" to determine whether their agents discriminate in the awarding of loans are currently entitled to an evidentiary privilege covering the work-product and results of the "self-test" if the lender takes "corrective action" to cure any discrimination revealed by the "self-test." *See* 12 CFR § 202.15. The privileged information is inadmissible in any proceeding alleging a violation of the Equal Credit Opportunity Act, and is not available to any government agency investigating violations of the Act.

HUD. In its regulations, HUD has created a "self-test" privilege almost identical to the Reserve System's for lenders who conduct "self-tests" to ensure their compliance with the Fair Housing Act's residential real-estate transaction provisions. *See* 24 CFR § 100.140 *et seq.*

FAA. The FAA has an Aviation Safety Reporting Program (ASRP) that prohibits the use for enforcement purposes of reports voluntarily submitted to the ASRP, *see* 14 CFR § 91.25, and that ensures the anonymity of the reporter and the confidentiality of the report.

C. Voluntary Disclosure Guide Elements

The Department should develop and adopt model policy guidance for federal agencies to assure consistency across the entire Administration with respect to voluntary disclosures of noncompliance. This guidance could also be used as the principled basis upon which to evaluate pending legislative and regulatory proposals containing immunities, evidentiary privileges and FOIA exemptions.

The development of policy guidance on voluntary disclosures should not be onerous, as the Administration and the Department have previously taken public positions opposing the use of immunity and evidentiary privileges. See Letter from the Attorney General to EPA Administrator Browner (April 6, 1995); Letter from the Vice President to Congressman Condit (July 24, 1996). The letters express opposition to the creation of evidentiary privileges and immunities generally, and in the environmental context in particular.

The policy guidance that the Department recommends be developed should favor discretionary leniency, and should make use of the following elements relevant to the exercise of such leniency:

(i) the voluntary discovery and prompt disclosure of any potential violation, where " voluntary" means at a time before the federal agency or Department has initiated an investigation, commenced an inspection, or issued an information request, or before notice of a citizen suit, legal complaint by a third party, or reporting of the violation by a "whistleblower" employee;
(ii) the full cooperation of the disclosing party in investigating the extent of the violation including the facts of any related violations;
(iii) the adoption of preventive measures to ensure that the particular violation at issue, or others like it, does not recur;
(iv) expeditious restitution and/or remediation of the harm, if any, caused by the violation;
(v) whether information was discovered pursuant to a systematic, documented and objective audit program (which will encourage companies to erect such programs before violations

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take place);

(vi) ineligibility for repeat offenders, *i.e.*, entities that repeat the same or similar violation within a fixed time period (*e.g.*, 3 years) are disqualified from receiving leniency; and

(vii) exclusion for violations that cause serious harm to public health, safety, or welfare.

Leniency would remain discretionary, to account for cases where other circumstances make leniency unwarranted as a policy or practical matter.

federal register

Friday
December 22, 1995

Part III

Environmental Protection Agency

Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations; Notice

VIRONMENTAL PROTECTION
AGENCY

[FRL-5400-1]

Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Policy Statement.

SUMMARY: The Environmental Protection Agency (EPA) today issues its final policy to enhance protection of human health and the environment by encouraging regulated entities to voluntarily discover, and disclose and correct violations of environmental requirements. Incentives include eliminating or substantially reducing the gravity component of civil penalties and not recommending cases for criminal prosecution where specified conditions are met, to those who voluntarily self-disclose and promptly correct violations. The policy also restates EPA's long-standing practice of not requesting voluntary audit reports to trigger enforcement investigations. This policy was developed in close consultation with the U.S. Department of Justice, states, public interest groups and the regulated community, and will be applied uniformly by the Agency's enforcement programs.

DATES: This policy is effective January 22, 1996.

FOR FURTHER INFORMATION CONTACT: Additional documentation relating to the development of this policy is contained in the environmental auditing public docket. Documents from the docket may be obtained by calling (202) 260-7548, requesting an index to docket #C-94-01, and faxing document requests to (202) 260-4400. Hours of operation are 8 a.m. to 5:30 p.m., Monday through Friday, except legal holidays. Additional contacts are Robert Fentress or Brian Riedel, at (202) 564-4187.

SUPPLEMENTARY INFORMATION:

I. Explanation of Policy

A. Introduction

The Environmental Protection Agency today issues its final policy to enhance protection of human health and the environment by encouraging regulated entities to discover voluntarily, disclose, correct and prevent violations of federal environmental law. Effective 30 days from today, where violations are found through voluntary environmental audits or efforts that reflect a regulated entity's due diligence, and are promptly disclosed and expeditiously corrected, EPA will not seek gravity-based (i.e., non-economic benefit) penalties and will generally not recommend criminal prosecution against the regulated entity. EPA will reduce gravity-based penalties by 75% for violations that are voluntarily discovered, and are promptly disclosed and corrected, even if not found through a formal audit or due diligence. Finally, the policy restates EPA's long-held policy and practice to refrain from routine requests for environmental audit reports.

The policy includes important safeguards to deter irresponsible behavior and protect the public and environment. For example, in addition to prompt disclosure and expeditious correction, the policy requires companies to act to prevent recurrence of the violation and to remedy any environmental harm which may have occurred. Repeated violations or those which result in actual harm or may present imminent and substantial endangerment are not eligible for relief under this policy, and companies will not be allowed to gain an economic advantage over their competitors by delaying their investment in compliance. Corporations remain criminally liable for violations that result from conscious disregard of their obligations under the law, and individuals are liable for criminal misconduct.

The issuance of this policy concludes EPA's eighteen-month public evaluation of the optimum way to encourage voluntary self-policing while preserving fair and effective enforcement. The incentives, conditions and exceptions announced today reflect thoughtful suggestions from the Department of Justice, state attorneys general and local prosecutors, state environmental agencies, the regulated community, and public interest organizations. EPA believes that it has found a balanced and responsible approach, and will conduct a study within three years to determine the effectiveness of this policy.

B. Public Process

One of the Environmental Protection Agency's most important responsibilities is ensuring compliance with federal laws that protect public health and safeguard the environment. Effective deterrence requires inspecting, bringing penalty actions and securing compliance and remediation of harm. But EPA realizes that achieving compliance also requires the cooperation of thousands of businesses and other regulated entities subject to these requirements. Accordingly, in May of 1994, the Administrator asked the Office of Enforcement and Compliance Assurance (OECA) to determine whether additional incentives were needed to encourage voluntary disclosure and correction of violations uncovered during environmental audits.

EPA began its evaluation with a two-day public meeting in July of 1994, in Washington, D.C., followed by a two-day meeting in San Francisco on January 19, 1995 with stakeholders from industry, trade groups, state environmental commissioners and attorneys general, district attorneys, public interest organizations and professional environmental auditors. The Agency also established and maintained a public docket of testimony presented at these meetings and all comment and correspondence submitted to EPA by outside parties on this issue.

In addition to considering opinion and information from stakeholders, the Agency examined other federal and state policies related to self-policing, self-disclosure and correction. The Agency also considered relevant surveys on auditing practices in the private sector. EPA completed the first stage of this effort with the announcement of an interim policy on April 3 of this year, which defined conditions under which EPA would reduce civil penalties and not recommend criminal prosecution for companies that audited, disclosed, and corrected violations.

Interested parties were asked to submit comment on the interim policy by June 30 of this year (60 FR 16875), and EPA received over 300 responses from a wide variety of private and public organizations. (Comments on the interim audit policy are contained in the Auditing Policy Docket, hereinafter, "Docket".) Further, the American Bar Association SONREEL Subcommittee hosted five days of dialogue with representatives from the regulated industry, states and public interest organizations in June and September of this year, which identified options for strengthening the interim policy. The changes to the interim policy announced today reflect insight gained through comments submitted to EPA, the ABA dialogue, and the Agency's practical experience implementing the interim policy.

C. Purpose

This policy is designed to encourage greater compliance with laws and regulations that protect human health and the environment. It promotes a higher standard of self-policing by waiving gravity-based penalties for

violations that are promptly disclosed and corrected, and which were discovered through voluntary audits or compliance management systems that demonstrate due diligence. To further promote compliance, the policy reduces gravity-based penalties by 75% for any violation voluntarily discovered and promptly disclosed and corrected, even if not found through an audit or compliance management system.

EPA's enforcement program provides a strong incentive for responsible behavior by imposing stiff sanctions for noncompliance. Enforcement has contributed to the dramatic expansion of environmental auditing measured in numerous recent surveys. For example, more than 90% of the corporate respondents to a 1995 Price-Waterhouse survey who conduct audits said that one of the reasons they did so was to find and correct violations before they were found by government inspectors. (A copy of the Price-Waterhouse survey is contained in the Docket as document VIII–A–76.)

At the same time, because government resources are limited, maximum compliance cannot be achieved without active efforts by the regulated community to police themselves. More than half of the respondents to the same 1995 Price-Waterhouse survey said that they would expand environmental auditing in exchange for reduced penalties for violations discovered and corrected. While many companies already audit or have compliance management programs, EPA believes that the incentives offered in this policy will improve the frequency and quality of these self-monitoring efforts.

D. Incentives for Self-Policing

Section C of EPA's policy identifies the major incentives that EPA will provide to encourage self-policing, self-disclosure, and prompt self-correction. These include not seeking gravity-based civil penalties or reducing them by 75%, declining to recommend criminal prosecution for regulated entities that self-police, and refraining from routine requests for audits. (As noted in Section C of the policy, EPA has refrained from making routine requests for audit reports since issuance of its 1986 policy on environmental auditing.)

1. Eliminating Gravity-Based Penalties

Under Section C(1) of the policy, EPA will not seek gravity-based penalties for violations found through auditing that are promptly disclosed and corrected. Gravity-based penalties will also be waived for violations found through any documented procedure for self-policing, where the company can show that it has a compliance management program that meets the criteria for due diligence in Section B of the policy.

Gravity-based penalties (defined in Section B of the policy) generally reflect the seriousness of the violator's behavior. EPA has elected to waive such penalties for violations discovered through due diligence or environmental audits, recognizing that these voluntary efforts play a critical role in protecting human health and the environment by identifying, correcting and ultimately preventing violations. All of the conditions set forth in Section D, which include prompt disclosure and expeditious correction, must be satisfied for gravity-based penalties to be waived.

As in the interim policy, EPA reserves the right to collect any economic benefit that may have been realized as a result of noncompliance, even where companies meet all other conditions of the policy. Economic benefit may be waived, however, where the Agency determines that it is insignificant.

After considering public comment, EPA has decided to retain the discretion to recover economic benefit for two reasons. First, it provides an incentive to comply on time. Taxpayers expect to pay interest or a penalty fee if their tax payments are late; the same principle should apply to corporations that have delayed their investment in compliance. Second, it is fair because it protects responsible companies from being undercut by their noncomplying competitors, thereby preserving a level playing field. The concept of recovering economic benefit was supported in public comments by many stakeholders, including industry representatives (see, *e.g.*, Docket, II–F–39, II–F–28, and II–F–18).

2. 75% Reduction of Gravity

The policy appropriately limits the complete waiver of gravity-based civil penalties to companies that meet the higher standard of environmental auditing or systematic compliance management. However, to provide additional encouragement for the kind of self-policing that benefits the public, gravity-based penalties will be reduced by 75% for a violation that is voluntarily discovered, promptly disclosed and expeditiously corrected, even if it was not found through an environmental audit and the company cannot document due diligence. EPA expects that this will encourage companies to come forward and work with the Agency to resolve environmental problems and begin to develop an effective compliance management program.

Gravity-based penalties will be reduced 75% only where the company meets all conditions in Sections D(2) through D(9). EPA has eliminated language from the interim policy indicating that penalties may be reduced "up to" 75% where "most" conditions are met, because the Agency believes that all of the conditions in D(2) through D(9) are reasonable and essential to achieving compliance. This change also responds to requests for greater clarity and predictability.

3. No Recommendations for Criminal Prosecution

EPA has never recommended criminal prosecution of a regulated entity based on voluntary disclosure of violations discovered through audits and disclosed to the government before an investigation was already under way. Thus, EPA will not recommend criminal prosecution for a regulated entity that uncovers violations through environmental audits or due diligence, promptly discloses and expeditiously corrects those violations, and meets all other conditions of Section D of the policy.

This policy is limited to good actors, and therefore has important limitations. It will not apply, for example, where corporate officials are consciously involved in or willfully blind to violations, or conceal or condone noncompliance. Since the regulated entity must satisfy all of the conditions of Section D of the policy, violations that caused serious harm or which may pose imminent and substantial endangerment to human health or the environment are not covered by this policy. Finally, EPA reserves the right to recommend prosecution for the criminal conduct of any culpable individual.

Even where all of the conditions of this policy are not met, however, it is important to remember that EPA may decline to recommend prosecution of a company or individual for many other reasons under other Agency enforcement policies. For example, the Agency may decline to recommend prosecution where there is no significant harm or culpability and the individual or corporate defendant has cooperated fully.

Where a company has met the conditions for avoiding a recommendation for criminal prosecution under this policy, it will not face any civil liability for gravity-based penalties. That is because the same conditions for discovery, disclosure, and correction apply in both cases. This represents a clarification of the interim policy, not a substantive change.

4. No Routine Requests for Audits

EPA is reaffirming its policy, in effect s 1986, to refrain from routine requests for audits. Eighteen months of public testimony and debate have produced no evidence that the Agency has deviated, or should deviate, from this policy.

If the Agency has independent evidence of a violation, it may seek information needed to establish the extent and nature of the problem and the degree of culpability. In general, however, an audit which results in prompt correction clearly will reduce liability, not expand it. Furthermore, a review of the criminal docket did not reveal a single criminal prosecution for violations discovered as a result of an audit self-disclosed to the government.

E. Conditions

Section D describes the nine conditions that a regulated entity must meet in order for the Agency not to seek (or to reduce) gravity-based penalties under the policy. As explained in the Summary above, regulated entities that meet all nine conditions will not face gravity-based civil penalties, and will generally not have to fear criminal prosecution. Where the regulated entity meets all of the conditions except the F D(1)), EPA will reduce gravity-b d penalties by 75%.

1. Discovery of the Violation Through an Environmental Audit or Due Diligence

Under Section D(1), the violation must have been discovered through either (a) an environmental audit that is systematic, objective, and periodic as defined in the 1986 audit policy, or (b) a documented, systematic procedure or practice which reflects the regulated entity's due diligence in preventing, detecting, and correcting violations. The interim policy provided full credit for any violation found through "voluntary self-evaluation," even if the evaluation did not constitute an audit. In order to receive full credit under the final policy, any self-evaluation that is not an audit must be part of a "due diligence" program. Both "environmental audit" and "due diligence" are defined in Section B of the policy.

Where the violation is discovered through a "systematic procedure or practice" which is not an audit, the regulated entity will be asked to document how its program reflects the criteria for due diligence as defined in Se 1 B of the policy. These criteria, wh.... are adapted from existing codes of practice such as the 1991 Criminal Sentencing Guidelines, were fully discussed during the ABA dialogue. The criteria are flexible enough to accommodate different types and sizes of businesses. The Agency recognizes that a variety of compliance management programs may develop under the due diligence criteria, and will use its review under this policy to determine whether basic criteria have been met.

Compliance management programs which train and motivate production staff to prevent, detect and correct violations on a daily basis are a valuable complement to periodic auditing. The policy is responsive to recommendations received during public comment and from the ABA dialogue to give compliance management efforts which meet the criteria for due diligence the same penalty reduction offered for environmental audits. (See, e.g., II–F–39, II–E–18, and II–G–18 in the Docket.)

EPA may require as a condition of penalty mitigation that a description of the regulated entity's due diligence efforts be made publicly available. The Agency added this provision in response to suggestions from environmental groups, and believes that the availability of such information will allow the public to judge the adequacy of compliance management systems, lead to enhanced compliance, and foster greater public trust in the integrity of compliance management systems.

2. Voluntary Discovery and Prompt Disclosure

Under Section D(2) of the final policy, the violation must have been identified voluntarily, and not through a monitoring, sampling, or auditing procedure that is required by statute, regulation, permit, judicial or administrative order, or consent agreement. Section D(4) requires that disclosure of the violation be prompt and in writing. To avoid confusion and respond to state requests for greater clarity, disclosures under this policy should be made to EPA. The Agency will work closely with states in implementing the policy.

The requirement that discovery of the violation be voluntary is consistent with proposed federal and state bills which would reward those discoveries that the regulated entity can legitimately attribute to its own voluntary efforts.

The policy gives three specific examples of discovery that would not be voluntary, and therefore would not be eligible for penalty mitigation: emissions violations detected through a required continuous emissions monitor, violations of NPDES discharge limits found through prescribed monitoring, and violations discovered through a compliance audit required to be performed by the terms of a consent order or settlement agreement.

The final policy generally applies to any violation that is voluntarily discovered, regardless of whether the violation is required to be reported. This definition responds to comments pointing out that reporting requirements are extensive, and that excluding them from the policy's scope would severely limit the incentive for self-policing (see, e.g., II–C–48 in the Docket).

The Agency wishes to emphasize that the integrity of federal environmental law depends upon timely and accurate reporting. The public relies on timely and accurate reports from the regulated community, not only to measure compliance but to evaluate health or environmental risk and gauge progress in reducing pollutant loadings. EPA expects the policy to encourage the kind of vigorous self-policing that will serve these objectives, and not to provide an excuse for delayed reporting. Where violations of reporting requirements are voluntarily discovered, they must be promptly reported (as discussed below). Where a failure to report results in imminent and substantial endangerment or serious harm, that violation is not covered under this policy (see Condition D(8)). The policy also requires the regulated entity to prevent recurrence of the violation, to ensure that noncompliance with reporting requirements is not repeated. EPA will closely scrutinize the effect of the policy in furthering the public interest in timely and accurate reports from the regulated community.

Under Section D(4), disclosure of the violation should be made within 10 days of its discovery, and in writing to EPA. Where a statute or regulation requires reporting be made in less than 10 days, disclosure should be made within the time limit established by law. Where reporting within ten days is not practical because the violation is complex and compliance cannot be determined within that period, the Agency may accept later disclosures if the circumstances do not present a serious threat and the regulated entity meets its burden of showing that the additional time was needed to determine compliance status.

This condition recognizes that it is critical for EPA to get timely reporting of violations in order that it might have clear notice of the violations and the opportunity to respond if necessary, as well as an accurate picture of a given facility's compliance record. Prompt disclosure is also evidence of the regulated entity's good faith in wanting

to achieve or return to compliance as soon as possible.

In the final policy, the Agency has added the words, "or may have occurred," to the sentence, "The regulated entity fully discloses that a specific violation has occurred, or may have occurred * * *." This change, which was made in response to comments received, clarifies that where an entity has some doubt about the existence of a violation, the recommended course is for it to disclose and allow the regulatory authorities to make a definitive determination.

In general, the Freedom of Information Act will govern the Agency's release of disclosures made pursuant to this policy. EPA will, independently of FOIA, make publicly available any compliance agreements reached under the policy (see Section H of the policy), as well as descriptions of due diligence programs submitted under Section D.1 of the Policy. Any material claimed to be Confidential Business Information will be treated in accordance with EPA regulations at 40 C.F.R. Part 2.

3. Discovery and Disclosure Independent of Government or Third Party Plaintiff

Under Section D(3), in order to be "voluntary", the violation must be identified and disclosed by the regulated entity prior to: the commencement of a federal state or local agency inspection, investigation, or information request; notice of a citizen suit; legal complaint by a third party; the reporting of the violation to EPA by a "whistleblower" employee; and imminent discovery of the violation by a regulatory agency.

This condition means that regulated entities must have taken the initiative to find violations and promptly report them, rather than reacting to knowledge of a pending enforcement action or third-party complaint. This concept was reflected in the interim policy and in federal and state penalty immunity laws and did not prove controversial in the public comment process.

4. Correction and Remediation

Section D(5) ensures that, in order to receive the penalty mitigation benefits available under the policy, the regulated entity not only voluntarily discovers and promptly discloses a violation, but expeditiously corrects it, remedies any harm caused by that violation (including responding to any spill and carrying out any removal or remedial action required by law), and expeditiously certifies in writing to appropriate state, local and EPA authorities that violations have been corrected. It also enables EPA to ensure that the regulated entity will be publicly accountable for its commitments through binding written agreements, orders or consent decrees where necessary.

The final policy requires the violation to be corrected within 60 days, or that the regulated entity provide written notice where violations may take longer to correct. EPA recognizes that some violations can and should be corrected immediately, while others (e.g., where capital expenditures are involved), may take longer than 60 days to correct. In all cases, the regulated entity will be expected to do its utmost to achieve or return to compliance as expeditiously as possible.

Where correction of the violation depends upon issuance of a permit which has been applied for but not issued by federal or state authorities, the Agency will, where appropriate, make reasonable efforts to secure timely review of the permit.

5. Prevent Recurrence

Under Section D(6), the regulated entity must agree to take steps to prevent a recurrence of the violation, including but not limited to improvements to its environmental auditing or due diligence efforts. The final policy makes clear that the preventive steps may include improvements to a regulated entity's environmental auditing or due diligence efforts to prevent recurrence of the violation.

In the interim policy, the Agency required that the entity implement appropriate measures to prevent a recurrence of the violation, a requirement that operates prospectively. However, a separate condition in the interim policy also required that the violation not indicate "a failure to take appropriate steps to avoid repeat or recurring violations"—a requirement that operates retrospectively. In the interest of both clarity and fairness, the Agency has decided for purposes of this condition to keep the focus prospective and thus to require only that steps be taken to prevent recurrence of the violation after it has been disclosed.

6. No Repeat Violations

In response to requests from commenters (see, e.g., II–F–39 and II–C–18 in the Docket), EPA has established "bright lines" to determine when previous violations will bar a regulated entity from obtaining relief under this policy. These will help protect the public and responsible companies by ensuring that penalties are not waived for repeat offenders. Under condition D(7), the same or closely-related violation must not have occurred previously within the past three years at the same facility, or be part of a pattern of violations on the regulated entity's part over the past five years. This provides companies with a continuing incentive to prevent violations, without being unfair to regulated entities responsible for managing hundreds of facilities. It would be unreasonable to provide unlimited amnesty for repeated violations of the same requirement.

The term "violation," includes any violation subject to a federal or state civil judicial or administrative order, consent agreement, conviction or plea agreement. Recognizing that minor violations are sometimes settled without a formal action in court, the term also covers any act or omission for which the regulated entity has received a penalty reduction in the past. Together, these conditions identify situations in which the regulated community has had clear notice of its noncompliance and an opportunity to correct.

7. Other Violations Excluded

Section D(8) makes clear that penalty reductions are not available under this policy for violations that resulted in serious actual harm or which may have presented an imminent and substantial endangerment to public health or the environment. Such events indicate a serious failure (or absence) of a self-policing program, which should be designed to prevent such risks, and it would seriously undermine deterrence to waive penalties for such violations. These exceptions are responsive to suggestions from public interest organizations, as well as other commenters. (See, e.g., II–F–39 and II–G–18 in the Docket.)

The final policy also excludes penalty reductions for violations of the specific terms of any order, consent agreement, or plea agreement. (See, II–E–60 in the Docket.) Once a consent agreement has been negotiated, there is little incentive to comply if there are no sanctions for violating its specific requirements. The exclusion in this section applies to violations of the terms of any response, removal or remedial action covered by a written agreement.

8. Cooperation

Under Section D(9), the regulated entity must cooperate as required by EPA and provide information necessary to determine the applicability of the policy. This condition is largely unchanged from the interim policy. In the final policy, however, the Agency has added that "cooperation" includes

assistance in determining the facts of any related violations suggested by the disclosure, as well as of the disclosed violation itself. This was added to allow the agency to obtain information about any violations indicated by the disclosure, even where the violation is not initially identified by the regulated entity.

F. Opposition to Privilege

The Agency remains firmly opposed to the establishment of a statutory evidentiary privilege for environmental audits for the following reasons:

1. Privilege, by definition, invites secrecy, instead of the openness needed to build public trust in industry's ability to self-police. American law reflects the high value that the public places on fair access to the facts. The Supreme Court, for example, has said of privileges that, "[w]hatever their origins, these exceptions to the demand for every man's evidence are not lightly created nor expansively construed, for they are in derogation of the search for truth." *United States* v. *Nixon*, 418 U.S. 683 (1974). Federal courts have unanimously refused to recognize a privilege for environmental audits in the context of government investigations. See, *e.g.*, *United States* v. *Dexter*, 132 F.R.D. 8, 9–10 (D.Conn. 1990) (application of a privilege "would effectively impede [EPA's] ability to enforce the Clean Water Act, and would be contrary to stated public policy.")

2. Eighteen months have failed to produce any evidence that a privilege is needed. Public testimony on the interim policy confirmed that EPA rarely uses audit reports as evidence. Furthermore, surveys demonstrate that environmental auditing has expanded rapidly over the past decade without the stimulus of a privilege. Most recently, the 1995 Price Waterhouse survey found that those few large or mid-sized companies that do not audit generally do not perceive any need to; concern about confidentiality ranked as one of the least important factors in their decisions.

3. A privilege would invite defendants to claim as "audit" material almost any evidence the government needed to establish a violation or determine who was responsible. For example, most audit privilege bills under consideration in federal and state legislatures would arguably protect factual information—such as health studies or contaminated sediment data—and not just the conclusions of auditors. While the government must have access to required monitoring data under the law, as some industry commenters have suggested, a privilege of that nature would cloak underlying facts needed to determine whether such data were accurate.

4. An audit privilege would breed litigation, as both parties struggled to determine what material fell within its scope. The problem is compounded by the lack of any clear national standard for audits. The "*in camera*" (i.e., non-public) proceedings used to resolve these disputes under some statutory schemes would result in a series of time-consuming, expensive mini-trials.

5. The Agency's policy eliminates the need for any privilege as against the government, by reducing civil penalties and criminal liability for those companies that audit, disclose and correct violations. The 1995 Price Waterhouse survey indicated that companies would expand their auditing programs in exchange for the kind of incentives that EPA provides in its policy.

6. Finally, audit privileges are strongly opposed by the law enforcement community, including the National District Attorneys Association, as well as by public interest groups. (See, *e.g.*, Docket, II–C–21, II–C–28, II–C–52, IV–G–10, II–C–25, II–C–33, II–C–52, II–C–48, and II–G–13 through II–G–24.)

G. Effect on States

The final policy reflects EPA's desire to develop fair and effective incentives for self-policing that will have practical value to states that share responsibility for enforcing federal environmental laws. To that end, the Agency has consulted closely with state officials in developing this policy, through a series of special meetings and conference calls in addition to the extensive opportunity for public comment. As a result, EPA believes its final policy is grounded in common-sense principles that should prove useful in the development of state programs and policies.

As always, states are encouraged to experiment with different approaches that do not jeopardize the fundamental national interest in assuring that violations of federal law do not threaten the public health or the environment, or make it profitable not to comply. The Agency remains opposed to state legislation that does not include these basic protections, and reserves its right to bring independent action against regulated entities for violations of federal law that threaten human health or the environment, reflect criminal conduct or repeated noncompliance, or allow one company to make a substantial profit at the expense of its law-abiding competitors. Where a state has obtained appropriate sanctions needed to deter such misconduct, there is no need for EPA action.

H. Scope of Policy

EPA has developed this document as a policy to guide settlement actions. EPA employees will be expected to follow this policy, and the Agency will take steps to assure national consistency in application. For example, the Agency will make public any compliance agreements reached under this policy, in order to provide the regulated community with fair notice of decisions and greater accountability to affected communities. Many in the regulated community recommended that the Agency convert the policy into a regulation because they felt it might ensure greater consistency and predictability. While EPA is taking steps to ensure consistency and predictability and believes that it will be successful, the Agency will consider this issue and will provide notice if it determines that a rulemaking is appropriate.

II. Statement of Policy: Incentives for Self-Policing

Discovery, Disclosure, Correction and Prevention

A. Purpose.

This policy is designed to enhance protection of human health and the environment by encouraging regulated entities to voluntarily discover, disclose, correct and prevent violations of federal environmental requirements.

B. Definitions

For purposes of this policy, the following definitions apply:

"Environmental Audit" has the definition given to it in EPA's 1986 audit policy on environmental auditing, i.e., "a systematic, documented, periodic and objective review by regulated entities of facility operations and practices related to meeting environmental requirements."

"Due Diligence" encompasses the regulated entity's systematic efforts, appropriate to the size and nature of its business, to prevent, detect and correct violations through all of the following:

(a) Compliance policies, standards and procedures that identify how employees and agents are to meet the requirements of laws, regulations, permits and other sources of authority for environmental requirements;

(b) Assignment of overall responsibility for overseeing compliance with policies, standards, and procedures, and assignment of specific responsibility for assuring compliance at each facility or operation;

(c) Mechanisms for systematically assuring that compliance policies, standards and procedures are being carried out, including monitoring and auditing systems reasonably designed to detect and correct violations, periodic evaluation of the overall performance of the compliance management system, and a means for employees or agents to report violations of environmental requirements without fear of retaliation;

(d) Efforts to communicate effectively the regulated entity's standards and procedures to all employees and other agents;

(e) Appropriate incentives to managers and employees to perform in accordance with the compliance policies, standards and procedures, including consistent enforcement through appropriate disciplinary mechanisms; and

(f) Procedures for the prompt and appropriate correction of any violations, and any necessary modifications to the regulated entity's program to prevent future violations.

"Environmental audit report" means the analysis, conclusions, and recommendations resulting from an environmental audit, but does not include data obtained in, or testimonial evidence concerning, the environmental audit.

"Gravity-based penalties" are that portion of a penalty over and above the economic benefit, i.e., the punitive portion of the penalty, rather than that portion representing a defendant's economic gain from non-compliance. (For further discussion of this concept, see "A Framework for Statute-Specific Approaches to Penalty Assessments", #GM-22, 1980, U.S. EPA General Enforcement Policy Compendium).

"Regulated entity" means any entity, including a federal, state or municipal agency or facility, regulated under federal environmental laws.

C. Incentives for Self-Policing

1. No Gravity-Based Penalties

Where the regulated entity establishes that it satisfies all of the conditions of Section D of the policy, EPA will not seek gravity-based penalties for violations of federal environmental requirements.

2. Reduction of Gravity-Based Penalties by 75%

EPA will reduce gravity-based penalties for violations of federal environmental requirements by 75% so long as the regulated entity satisfies all of the conditions of Section D(2) through D(9) below.

3. No Criminal Recommendations

(a) EPA will not recommend to the Department of Justice or other prosecuting authority that criminal charges be brought against a regulated entity where EPA determines that all of the conditions in Section D are satisfied, so long as the violation does not demonstrate or involve:

(i) a prevalent management philosophy or practice that concealed or condoned environmental violations; or

(ii) high-level corporate officials' or managers' conscious involvement in, or willful blindness to, the violations.

(b) Whether or not EPA refers the regulated entity for criminal prosecution under this section, the Agency reserves the right to recommend prosecution for the criminal acts of individual managers or employees under existing policies guiding the exercise of enforcement discretion.

4. No Routine Request for Audits

EPA will not request or use an environmental audit report to initiate a civil or criminal investigation of the entity. For example, EPA will not request an environmental audit report in routine inspections. If the Agency has independent reason to believe that a violation has occurred, however, EPA may seek any information relevant to identifying violations or determining liability or extent of harm.

D. Conditions

1. Systematic Discovery

The violation was discovered through:

(a) an environmental audit; or

(b) an objective, documented, systematic procedure or practice reflecting the regulated entity's due diligence in preventing, detecting, and correcting violations. The regulated entity must provide accurate and complete documentation to the Agency as to how it exercises due diligence to prevent, detect and correct violations according to the criteria for due diligence outlined in Section B. EPA may require as a condition of penalty mitigation that a description of the regulated entity's due diligence efforts be made publicly available.

2. Voluntary Discovery

The violation was identified voluntarily, and not through a legally mandated monitoring or sampling requirement prescribed by statute, regulation, permit, judicial or administrative order, or consent agreement. For example, the policy does not apply to:

(a) emissions violations detected through a continuous emissions monitor (or alternative monitor established in a permit) where any such monitoring is required;

(b) violations of National Pollutant Discharge Elimination System (NPDES) discharge limits detected through required sampling or monitoring;

(c) violations discovered through a compliance audit required to be performed by the terms of a consent order or settlement agreement.

3. Prompt Disclosure

The regulated entity fully discloses a specific violation within 10 days (or such shorter period provided by law) after it has discovered that the violation has occurred, or may have occurred, in writing to EPA;

4. Discovery and Disclosure Independent of Government or Third Party Plaintiff

The violation must also be identified and disclosed by the regulated entity prior to:

(a) the commencement of a federal, state or local agency inspection or investigation, or the issuance by such agency of an information request to the regulated entity;

(b) notice of a citizen suit;

(c) the filing of a complaint by a third party;

(d) the reporting of the violation to EPA (or other government agency) by a "whistleblower" employee, rather than by one authorized to speak on behalf of the regulated entity; or

(e) imminent discovery of the violation by a regulatory agency;

5. Correction and Remediation

The regulated entity corrects the violation within 60 days, certifies in writing that violations have been corrected, and takes appropriate measures as determined by EPA to remedy any environmental or human harm due to the violation. If more than 60 days will be needed to correct the violation(s), the regulated entity must so notify EPA in writing before the 60-day period has passed. Where appropriate, EPA may require that to satisfy conditions 5 and 6, a regulated entity enter into a publicly available written agreement, administrative consent order or judicial consent decree, particularly where compliance or remedial measures are complex or a lengthy schedule for attaining and maintaining compliance or remediating harm is required;

6. Prevent Recurrence

The regulated entity agrees in writing to take steps to prevent a recurrence of the violation, which may include improvements to its environmental auditing or due diligence efforts;

7. No Repeat Violations

The specific violation (or closely related violation) has not occurred previously within the past three years at the same facility, or is not part of a pattern of federal, state or local violations by the facility's parent organization (if any), which have occurred within the past five years. For the purposes of this section, a violation is:

(a) any violation of federal, state or local environmental law identified in a judicial or administrative order, consent agreement or order, complaint, or notice of violation, conviction or plea agreement; or

(b) any act or omission for which the regulated entity has previously received penalty mitigation from EPA or a state or local agency.

8. Other Violations Excluded

The violation is not one which (i) resulted in serious actual harm, or may have presented an imminent and substantial endangerment to, human health or the environment, or (ii) violates the specific terms of any judicial or administrative order, or consent agreement.

9. Cooperation

The regulated entity cooperates as requested by EPA and provides such information as is necessary and requested by EPA to determine applicability of this policy. Cooperation includes, at a minimum, providing all requested documents and access to employees and assistance in investigating the violation, any noncompliance problems related to the disclosure, and any environmental consequences related to the violations.

E. Economic Benefit

EPA will retain its full discretion to recover any economic benefit gained as a result of noncompliance to preserve a "level playing field" in which violators do not gain a competitive advantage over regulated entities that do comply. EPA may forgive the entire penalty for violations which meet conditions 1 through 9 in section D and, in the Agency's opinion, do not merit any penalty due to the insignificant amount of any economic benefit.

F. Effect on State Law, Regulation or Policy

EPA will work closely with states to encourage their adoption of policies that reflect the incentives and conditions outlined in this policy. EPA remains firmly opposed to statutory environmental audit privileges that shield evidence of environmental violations and undermine the public's right to know, as well as to blanket immunities for violations that reflect criminal conduct, present serious threats or actual harm to health and the environment, allow noncomplying companies to gain an economic advantage over their competitors, or reflect a repeated failure to comply with federal law. EPA will work with states to address any provisions of state audit privilege or immunity laws that are inconsistent with this policy, and which may prevent a timely and appropriate response to significant environmental violations. The Agency reserves its right to take necessary actions to protect public health or the environment by enforcing against any violations of federal law.

G. Applicability

(1) This policy applies to the assessment of penalties for any violations under all of the federal environmental statutes that EPA administers, and supersedes any inconsistent provisions in media-specific penalty or enforcement policies and EPA's 1986 Environmental Auditing Policy Statement.

(2) To the extent that existing EPA enforcement policies are not inconsistent, they will continue to apply in conjunction with this policy. However, a regulated entity that has received penalty mitigation for satisfying specific conditions under this policy may not receive additional penalty mitigation for satisfying the same or similar conditions under other policies for the same violation(s), nor will this policy apply to violations which have received penalty mitigation under other policies.

(3) This policy sets forth factors for consideration that will guide the Agency in the exercise of its prosecutorial discretion. It states the Agency's views as to the proper allocation of its enforcement resources. The policy is not final agency action, and is intended as guidance. It does not create any rights, duties, obligations, or defenses, implied or otherwise, in any third parties.

(4) This policy should be used whenever applicable in settlement negotiations for both administrative and civil judicial enforcement actions. It is not intended for use in pleading, at hearing or at trial. The policy may be applied at EPA's discretion to the settlement of administrative and judicial enforcement actions instituted prior to, but not yet resolved, as of the effective date of this policy.

H. Public Accountability

(1) Within 3 years of the effective date of this policy, EPA will complete a study of the effectiveness of the policy in encouraging:

(a) changes in compliance behavior within the regulated community, including improved compliance rates;

(b) prompt disclosure and correction of violations, including timely and accurate compliance with reporting requirements;

(c) corporate compliance programs that are successful in preventing violations, improving environmental performance, and promoting public disclosure;

(d) consistency among state programs that provide incentives for voluntary compliance.

EPA will make the study available to the public.

(2) EPA will make publicly available the terms and conditions of any compliance agreement reached under this policy, including the nature of the violation, the remedy, and the schedule for returning to compliance.

I. Effective Date

This policy is effective January 22, 1996.

Dated: December 18, 1995.

Steven A. Herman,

Assistant Administrator for Enforcement and Compliance Assurance.

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BILLING CODE 6560–50–P

STATEMENT OF JIM HALL, PRINCIPAL PARTNER, HALL AND ASSOCIATES; FORMER CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD

Mr. Chairman, Mr. Ranking Member, Members of the Committee, thank you for the invitation to testify before you today. I am pleased to be here to share my experience with transportation safety, and its particular relevance to aspects of the Clean Water Act (CWA).

Briefly, let me spend a few moments on my previous role at the National Transportation Safety Board (NTSB) and on the Board's overall mission. I was nominated as member of the NTSB by President Bill Clinton in 1993, and subsequently served as the Board's Chairman from June 1994 to January 2001. I currently serve as President of Hall & Associates, where I advise a host of government and private clients on transportation safety and security issues.

Ever since Congress created the NTSB, the Safety Board has served as the 'eyes and ears' of the American people whenever there is a significant transportation incident. The mission, then and now, is to impartially and thoroughly investigate accidents to determine their cause, with the primary goal of preventing future accidents and providing Americans with continued confidence in the nation's many transportation modes. The Board issues scores of recommendations to government and industry every year. In making recommendations, the Board looks for, and historically achieves, a high level of voluntary compliance.

Likewise, NTSB investigations rely in large part on the voluntary and unpaid assistance of companies involved in accidents to understand what went wrong and how to fix it. This system of voluntary cooperation works exceedingly well, and the goal—a safer transport system—is considered so important to our national interest that Congress has given NTSB accident investigations priority over all other Federal investigations.

As Chairman, I often said our work focused on a single, very simple, point—the more information we have, the safer we all can be. During my tenure at NTSB, I was never bashful in speaking out about issues that sometimes inadvertently separate our government from that focus. The threat of criminal sanction for purely accidental behavior has the real potential to stifle cooperation, to stifle the ready development of information necessary to understand an occurrence and prevent its repetition.

That has a price, potentially high, and would need to be offset by the possibility that punishing pure accidents reduces their likelihood. I have seen no evidence for that proposition, and indeed, several successful safety programs sponsored by the Department of Transportation proceed on exactly the opposite presumption.

As the Members of this Committee are well aware, every mode of transportation is closely regulated for safety purposes under a variety of statutes, and each of these provides for both civil and criminal sanction for some classes of regulatory violation. Typically criminal violations are reserved for knowing violations—activities such as falsification of records or safety tests, the deliberate violation of regulatory standards, or willful or reckless behavior that leads to injury or death, or destruction of property.

However, one statute, the Clean Water Act (CWA), provides criminal penalties, including fines and imprisonment, for simple negligence. Simple negligence, as defined, does not require intent, or knowledge, or even willful or reckless disregard of norms. As such, it easily is charged and potentially just as easily proved in accidents where all due care was thought to have been exercised. Potentially, an entity believing that it is exercising due caution and using current technology and modern procedures may still find that the company, its supervisors, or its operating employees will be charged criminally, if a water source becomes polluted. Wholly apart from the impact that such a regime has on the ability of a company to attract top notch employees and managers, its implications for safety investigations and ultimately safe regulation are problematical at very best.

During my tenure at the NTSB, I became increasingly concerned with the trend toward the criminalization of any or all transportation accidents. Let me be clear, there are "accidents" where criminal prosecution is warranted and even the preferred course of action. While traditional criminal law theory requires a finding that one intended the consequences of the criminal act, it has long been accepted, and I accept, the proposition that wanton disregard of behavioral norms suffices to sustain a criminal prosecution, even if the consequences of the behavior were not intended, indeed even if they were as horrifying to the perpetrator as to the rest of us. No one hesitates to prosecute drunken driving as negligent homicide. But what good would come of prosecuting a driver who, blinded by the sun, lost track of the vehicle in front him and did harm identical to that of the drunk? How best to answer the questions raised by these issues became the major focus of a symposium

on Transportation Safety and the Law that the NTSB convened under my direction in April of 2000. This conference, attended by more than 400 representatives of public, private, and academic organizations, covered a host of important issues. However, discussion about when an accident warrants criminal prosecution was a dominant topic.

Two general themes emerged out of that symposium that bear repeating.

First, transportation safety is increasingly dependent on being able to spot trends, to see problems as they arise, to anticipate failures from sophisticated "data mining," and from the sometimes not-so-sophisticated self-disclosure of the near misses. This is an enormously productive field that is being pursued by almost all the regulatory agencies. And these agencies often include, as part of this type of program, some form of prosecutorial immunity for persons and companies who participate.

FAA, for example, treats self-disclosure from pilots, or data derived from quick access flight recorders as exempt from use in enforcement actions based on simple violations discovered. Of course the agency doesn't waive the right to proceed against knowing violations, and may even do so criminally. What agencies do say is we won't proceed against simple accidental behavior. Without such a promise, the data wouldn't be forthcoming, and safety would be compromised.

And that is exactly the issue with the Clean Water Act. Simple negligence can be treated as a criminal act, punishable by imprisonment. When accident investigators arrive on scene to find out what has occurred, they are in no way empowered to grant any immunity from prosecution for pure mistakes. So if there has been waterway contamination, prevention and understanding will take a back seat to legal maneuvering.

If the NTSB hopes to make timely recommendations based on their investigations, cooperation is necessary. NTSB recommendations form a basis by which the industry involved in the accident can make changes to avoid a re-occurrence of the incident. And avoiding future incidents provides more value to the public than attempting to prosecute a company or an employee for an accident.

A second and related theme that developed at the NTSB symposium was the belief that, while criminal enforcement can be an important tool, it should be directed toward intentional or reckless behavior rather than non-intentional conduct. Criminal enforcement, strong civil and administrative remedies, and an independent investigative body such as the NTSB, are all essential tools in protecting public safety, our transportation systems, and the environment. Criminal penalties do deter intentional conduct, but have a much diminished and unproven relationship to preventing purely accidental behavior.

Criminal enforcement, indiscriminately and routinely applied to ordinary industrial accidents, can deny safety regulators the very information they need to decide how to prevent similar accidents in the future. The rush to assess blame and punish those connected with the accident inevitably forces this vital information behind closed doors as the prosecution and the defendants prepare for a potential criminal trial. The intent should be to promote cooperation rather than threaten parties with punishment for things over which they had no control.

The language of the CWA, prosecutors' increasing use of the criminal negligence provisions of the CWA, and new views of the CWA taken by the courts have all combined to deter post-event industry cooperation when CWA criminal violations are potentially involved.

Individuals engaged in industrial activities that bring them in contact with water face a difficult proposition. How should companies respond to parallel criminal and accident investigations? In that situation, companies face conflicting demands on one hand, they need to be responsive and open to the public, and on the other, they the need to fairly protect their employees. That was one of the questions raised at our symposium, and I still cannot adequately answer that question.

Another issue is the effect that the possibility of criminal prosecution will have on hiring and retaining a skilled work force. Although I don't have direct experience, this was a common complaint that I heard while at the NTSB, and one that is intuitive. If skilled employees are to be subject to criminal charges for their role in an accident despite their training and the technologies at their disposal, then they will be less likely to engage in those occupations. These positions would then have to be filled with less qualified personnel or not filled at all, leaving the remaining employees over-extended. This could have a disastrous outcome and would be counterproductive to the intent of the CWA.

Defense attorneys representing firms and individuals facing criminal liability for accidental behavior often advise prudent reluctance in providing information to the NTSB. Other times, the NTSB arrives at an accident scene after a criminal investigation has already begun in earnest, and simply inspecting evidence can be extremely difficult for Board investigators.

The bottom line is if the NSTB can do a thorough investigation, and can complete its investigation, and have cooperation in that investigation, potential larger problems can be corrected before they cause future accidents or incidents. What's more, these problems can be understood in a broader context, and solutions can have an industry-wide application through consensus reached with the regulators and the firms involved.

However, a growing fear of criminal prosecution is rapidly compromising industry's willingness to cooperate in safety investigations, and, while this is understandable, it is in the long run contrary to the interests of government and industry alike. What is needed is a widespread agreement within the government not to proceed criminally for purely accidental behavior, particularly where firms have agreed to cooperate fully with the government's subsequent safety investigation. And amendment of the Clean Water Act to make clear that simple negligence is not sufficient for criminal prosecution is probably now necessary to recover from the tremors caused by recent court cases, which have chilling implications for supervisors, and managers who may be remote in time and place from the activities giving rise to negligent spill.

I do not believe in a model of enforcement that immediately sends all the parties, public and private, before a magistrate. I do believe in a robust regulatory regime with adequate civil, administrative, and criminal teeth to ensure compliance. At the same time, it is clearly counter-productive to the greater collective good to criminalize ordinary industrial accidents.

While this issue deserves a thoughtful review by this Committee, I submit that this one provision of the CWA clearly is inconsistent with the larger body of transportation law, and the criminalization of simple negligence really has no place in a statute not lacking for "teeth."

My primary concern is information, and more of it. Investigators and regulators need access to relevant information to do their jobs. To an increasing extent, information is becoming harder to obtain which impacts the Board's ability to investigate and make recommendations. We are all safer and more secure when we can learn from these incidents, and implement improved technologies and procedures as a result.

In conclusion, it is my conviction that the balance between appropriately pursuing individual wrong-doers on one-hand and the broader purpose of accident investigation and prevention on the other hand, tips more and more away from a focus on prevention. We follow this road at our long-term peril.

When there is no malfeasance, but merely an accident, our overriding concern should be fixing the problem, not the blame. By focusing criminal prosecutions where they are most appropriate, we protect the rights of workers, address scarce government resources in the most useful way, increase compliance and cooperation, and find answers more swiftly that can, in turn, be applied to prevention. I urge the Committee to think through this issue, and have no doubt the net result of a positive change in this provision will be increased safety, continued reduction in the number of incidents, and greater protection of our fellow citizens and the environment.

I thank the Committee for its consideration in allowing me to testify today. I would be happy to answer any questions that you may have.

STATEMENT OF THE AMERICAN WATERWAYS OPERATORS

The American Waterways Operators (AWO) appreciates the opportunity to submit this statement for the hearing record. AWO is the national trade association representing America's inland and coastal tugboat, towboat, and barge industry, the largest segment of the U.S.-flag domestic maritime industry. AWO's 375 member companies include the owners and operators of tugboats, towboats, and barges that move more than 800 million tons of America's cargo every year, including dry, liquid, containerized and specialty cargoes on the inland river system, the Atlantic, Pacific, and Gulf coasts, and the Great Lakes. The transportation of petroleum and petroleum products is a key segment of our industry's business: tank barges move 20 percent of the oil that fuels our economy and keeps our cars running and our homes warm. Powerful, state-of-the-art tugboats also provide tanker escort services to facilitate the safe movement of petroleum cargoes in busy ports and harbor approaches.

Chairman Inhofe and Senator Baucus, AWO would first like to thank you for convening this hearing to examine issues related to the Clean Water Act. AWO and its member companies are deeply committed to marine safety and environmental protection. We understand that one of the issues addressed at today's hearing will

be criminal liability for oil spill incidents. We believe that criminal liability, when imposed under OPA 90, should be employed only where a discharge is caused by conduct that is truly "criminal" in nature, i.e., where a discharge is caused by reckless, intentional or other conduct deemed criminal. We agree that the current "negligence" standard in OPA 90 is a lower threshold than traditionally seen for criminal liability. Criminal culpability in the United States typically requires intentional actions or omissions by individuals.

In addition, we are very concerned that responsible operators are exposed to criminal fines and potential imprisonment for maritime transportation-related oil spills due to the application and use of antiquated and unrelated strict criminal liability statutes. Strict criminal liability imposes criminal sanctions without requiring a showing of criminal knowledge, intent or even negligence. AWO and its members are very troubled, as are other responsible, law-abiding maritime interests, by both the Justice Department's increasing willingness in the post-OPA 90 environment to use strict criminal liability statutes and the increasing attention to criminal enforcement in oil spill incidents. These Federal actions imposing strict criminal liability have created an atmosphere of extreme uncertainty for AWO members about how to respond and cooperate with the Coast Guard and other Federal agencies in cleaning up an oil spill. Strict criminal liability statutes such as the Migratory Bird Treaty Act (16 U.S.C. 703 et.seq.) and the Refuse Act (33 U.S.C. 407, 411)—statutes that were enacted at the turn of the century to serve other purposes—have been used to harass and intimidate the maritime industry, and in effect, have turned every oil spill into a potential crime scene without regard to the fault or intent of companies, corporate officers and employees, and mariners.

The Migratory Bird Treaty Act (MBTA) provides that "it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill any migratory bird . . .", a violation of which is punishable by imprisonment and/or fines. Prior to the *Exxon Valdez* oil spill in 1989, the MBTA was primarily used to prosecute the illegal activities of hunters and capturers of migratory birds, as the Congress originally intended when it enacted the legislation in 1918. In the *Exxon Valdez* case itself, prior to the enactment of OPA 90, the MBTA was first used to support a criminal prosecution against a vessel owner in relation to a maritime oil spill, and this "hunting statute" has been used since against the maritime industry. The Refuse Act was enacted over 100 years ago at a time well before subsequent Federal legislation essentially replaced it with comprehensive requirements and regulations specifically directed to the maritime transportation of oil and other petroleum products.

OPA 90 provides a statutory framework for proceeding against individuals for civil and/or criminal penalties arising out of oil spills in the marine environment. When Congress crafted OPA 90, it balanced the imposition of stronger criminal and civil penalties with the need to promote enhanced cooperation among all of the parties involved in the spill prevention and response effort. OPA 90 imposes criminal liability for negligent violations and provides for punishment of up to 1-year imprisonment and/or fines between $2,500 and $25,000 per day. The punishment for each knowing violation was increased by OPA 90 to up to 3-years imprisonment and/or fines between $5,000 and $50,000 per day. Furthermore, OPA 90 added and/or substantially increased criminal penalties under the following pre-existing laws which comprehensively govern the maritime transportation of oil and other petroleum products:

- Negligent Vessel Operations. 46 U.S.C. 2302
- Vessel Inspections. 46 U.S.C. 3318
- Carriage of Liquid Bulk Dangerous Cargoes. 46 U.S.C. 3718
- Vessel Load Lines. 46 U.S.C. 5116
- Foreign Commerce Pilotage. 46 U.S.C. 8503(e)
- Ports and Waterways Safety Act. 33 U.S.C. 1232(b)
- Intervention on the High Seas Act. 33 U.S.C. 1481(a)
- Deepwater Port Act of 1974. 33 U. S.C. 1514(a)
- Act to Prevent Pollution from Ships. 33 U.S.C. 1908(a)

Congress, by omitting the Migratory Bird Treaty Act and the Refuse Act from this list of existing statutes modified by OPA 90, apparently did not anticipate or intend their use in the case of maritime oil spills.

In the event of an oil spill, a responsible party not only must manage the cleanup of the oil and the civil liability resulting from the spill, but also must protect itself from the criminal liability that now exists due to the available and willing use of strict criminal liability laws by the Federal Government. Managing the pervasive threat of strict criminal liability, by its very nature, prevents a responsible party from cooperating fully and completely in response to an oil spill situation. The OPA 90 "blueprint" of prevention and response is no longer clear. The use of the strict

criminal liability statutes has undermined the spill prevention and response objectives of OPA 90, the very goals that were established by Congress to preserve the environment, safeguard the public welfare, and promote the safe transportation of oil.

Archaic statutes such as the Migratory Bird Treaty Act and the Refuse Act are unrelated to the regulation and enforcement of oil transport activities and were not included within OPA 90 as one of the many applicable statutes where criminal liability could be found. Without the elimination of the use of such strict liability statutes, the maritime industry cannot avoid exposure to criminal liability, regardless of how diligently it adheres to prudent practice and safe environmental standards. As stated the U.S. Coast Guard's own environmental enforcement directive, a company, its officers, employees and mariners, in the event of an oil spill "could be convicted and sentenced to a criminal fine even where [they] took all reasonable precautions to avoid the discharge." (Criminal Enforcement of Environmental Laws, U.S. Coast Guard Commandant Instruction M16201.1 of 30 July, 1997.)

The exposure of mariners and management to criminal liability regardless of fault has had a negative impact on the recruitment and retention of qualified and committed personnel for the maritime transportation of oil and petroleum products. At a 1998 hearing of the Subcommittee on Coast Guard and Maritime Transportation of the House Committee on Transportation and Infrastructure, several working mariners noted this development. One Captain with long experience in the industry indicated that he could not recommend a similar career path to his children because of the uncertainty created by the existence of strict liability. A witness from the management of a company that transports petroleum testified that his company had modified its response protocol and had retained criminal counsel to assist in the event of a spill because of the potential impact of criminal liability on the company and its employees. At conferences held in 2001 and 2002, jointly sponsored by the Coast Guard, industry and labor organizations, criminal liability was identified as one of six factors affecting the recruitment and retention of mariners. The conclusion of the group considering criminal liability was that "(t)he unjustifiably low threshold for prosecution inhibits the recruitment and the retention of mariners." The group recommended changes in the laws governing criminal liability in the event of oil spills.

Criminal sanctions under OPA 90 should follow the traditional notion of what constitutes criminal acts in this country—namely, that a crime occurs when a knowing, intentional act is committed. AWO respectfully requests that the Environment and Public Works Committee take the lead on this critical issue by: (1) reaffirming the traditional definition of criminal conduct for prosecutions in oil spill incidents; and, (2) reasserting the preeminent role of OPA 90 as the statute providing the exclusive criminal penalties for oil spills. Such legislation would ensure increased cooperation and responsiveness, while not diluting the deterrent effect of stringent criminal penalties imposed under OPA 90 itself.

Thank you again for the opportunity to present this statement for the hearing record.

STATEMENT OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS

Mr. Chairman and Members of the Subcommittee, the American Society of Civil Engineers (ASCE) is pleased to offer this statement to the Subcommittee for the hearing on issues related to the implementation of the Clean Water Act.

ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 130,000 civil engineers in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering.

I. POLICY RECOMMENDATIONS

• ASCE supports a Clean Water Act (CWA) that maximizes, to the extent possible, the protection of our nation's waters and the beneficial use of those waters. The Act should aggressively address nonpoint source pollution from watersheds and also point sources, including from sanitary sewer overflows, combined sewer overflows, and storm sewer discharges.

• National policy should protect the beneficial uses of the nation's water and be flexible enough to allow innovative practices and means to achieve these goals.

• Water quality should be protected at the source through cooperative partnerships that utilize financial incentives or other market-based mechanisms. Emphasis needs to be given to protecting water quality and habitat from adverse impacts of

wet weather flows, including non-point sources, stormwater, and combined sewer overflows.

II. BACKGROUND

Wastewater treatment is now well established throughout the Nation, and the design, construction, and maintenance of treatment plants is understood. There is still a need for controlling other sources of point source pollution (e.g. stormwater wet weather systems, combined sewer overflows, sanitary sewer overflows, and stormwater discharges) and a much greater effort is needed to control nonpoint sources of pollution.

Measuring the effects of nutrients as well as toxic pollutants on water quality and ecosystems requires further research. Establishing source water programs will minimize downstream pollution programs. Watershed approaches to water-quality management offer the best way to integrate management of diverse pollution sources with the wide range of water usages seen in the United States.

The Federal Water Pollution Control Act is the principal law that deals with pollution in the nation's streams, lakes, and estuaries.[1] The Act, commonly referred to as the Clean Water Act, is "one of the landmark statutes of the twentieth century, ..."[2]

The Act consists of two major parts: a regulatory scheme that imposes progressively more stringent requirements on industries and cities to abate pollution and meet the statutory goal of zero discharge of pollutants and provisions that authorize Federal financial assistance for municipal wastewater treatment plant construction. Both are supported by permit and enforcement provisions. Programs at the Federal level are administered by the Environmental Protection Agency (EPA); the Act allows EPA to delegate enforcement and permitting authority to the states, and they have major responsibilities to implement the Act's programs.

In 1972, Congress declared that it intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters.[3] These objectives were accompanied by statutory goals to eliminate the discharge of pollutants into navigable waters by 1985 and to attain, wherever possible, waters deemed "fishable and swimmable" by 1983. While the goals have not been entirely achieved, progress has been made, especially in controlling conventional pollutants (suspended solids, bacteria, and oxygen-consuming materials) discharged by industries and municipal sewage treatment plants. These discrete sources are easily identifiable and regulated.

The Act focuses on two possible sources of pollution: point sources and nonpoint sources. Adopting a command-and-control response to water pollution, Congress dealt with the problem of point source pollution using the National Pollution Discharge Elimination System (NPDES) permit process. Under this approach, compliance rests on technology-based controls that limit the discharge of pollutants from any point source into certain waters unless that discharge complies with the Act's specific requirements.[4]

When the NPDES system fails to adequately cleanup certain rivers, streams, or smaller water segments, the Act requires use of a water-quality based approach. States are required to identify such waters, which are to be designated as "water quality limited segments" (WQLS). The states must then rank these waters in order of priority, and based on that ranking, calculate levels of permissible pollution called "total maximum daily loads" or TMDLs.[5]

TMDLs are the maximum quantity of a pollutant the water body can receive on a daily basis without violating the water quality standard. The TMDL calculations are to ensure that the cumulative impacts of multiple point source discharges and nonpoint source pollution are accounted for. The TMDL does not establish direct controls over pollutants, however. It is a technology-forcing program that may require pollutant sources within a watershed to install new pollution-control devices.

States may then institute whatever additional cleanup actions are necessary, which can include further controls on point and nonpoint pollution sources. Under the Act, states are required to submit lists of WQLSs and TMDLs to the EPA at certain times; the first were due by June 26, 1979.[6]

The TMDL program regulates waste load allocations for point sources, watershed allocations for nonpoint sources, and includes a margin of safety. It was intended to serve as a backstop to the NPDES permit program.

> Section 303(d) and the TMDL program were included in the Act as a second-string safeguard against failure of the primary water quality improvement mechanism, the NPDES program. As a result of its backup status, the TMDL program was not aggressively or broadly pursued until the late 1980's and early 1990's when it became clear that the NPDES program alone could not solve the country's water quality problems.[7]

The NPDES and TMDL approaches sanction the controlled release of pollutants into the ambient environment. Like virtually every aspect of the American environmental protection system, the programs assume that a certain amount of pollution—an external diseconomy—is acceptable in order to maintain the overall wealth and security of the Nation.

Such a tradeoff between economic welfare and ecological protection, while politically essential, cannot provide the most advantageous outcome to environmental degradation, however. Every contaminant release, no matter how well controlled, results in a progressively greater pollutant load on the environment, although it may be argued that the burden likely grows more slowly because the releases occur at less toxic levels than if there were no NPDES program at all.

The use of economic tools to assess the ecological effects of market-based activities in order to alleviate environmental pollution is a relatively new phenomenon. But human economic welfare, not the physical welfare of ecosystems or species, is at the heart of all neoclassical economic analysis.

In neoclassical economic theory, groups and individuals act to advance their own economic self-interest. Non-economic considerations—including real or potential damages to the commons from industrial pollution or other threats to the environment from economic activity—are not possible. This is because all market-driven economic systems are unsentimental and utilitarian; they do not place the preservation of natural resources above the need to improve the economic welfare of individuals and groups in the economy. The central function of neoclassical economics is the well-being of the consumers (and producers) who make up the economy.[8]

To state it clearly:

> The hallmark of welfare economics is that policies are assessed exclusively in terms of their effects on the well-being of individuals. Accordingly, whatever is relevant to individuals' well-being is relevant under welfare economics, and whatever is unrelated to individuals' well-being is excluded from consideration under welfare economics.[9]

Because classical economics concentrates on the control of pollution only as it affects the economic utility of agents in the economy, it frequently ignores the effect of pollution on economic activity and the resulting restrictions placed on the economy by increasingly polluted (and therefore scarcer) ecosystem resources.

Although the severe economic functionalism has been somewhat softened by a host of environmental laws like the Clean Water Act and other regulations governing virtually every aspect of American financial and industrial life, the use of economics to measure the benefits of these protective laws remains controversial. Indeed, the advent of new economic approaches—often called "natural capitalism" or "resource economics"—simply exacerbates the old problem of how best to allocate scarce natural resources.[10]

Despite some obvious disadvantages, however, economic solutions to environmental problems are increasingly seen as preferable by policymakers looking for different solutions to pollutant-control issues and ecological degradation.

> [There is] a general trend toward using market mechanisms to attain environmental protection objectives. Market-based programs operate under the assumption that allowing regulated entities to choose among a range of compliance options results in more efficient environmental management than does traditional "command-and-control" regulation. Essentially, environmental markets attach costs to environmentally damaging activities and values to environmental benefits, thereby encouraging companies and individuals to consider the environmental impact of their activities. Regulators increasingly are turning to taxes, subsidies, unit charges, deposit-refund schemes, and tradable permit programs to force regulated entities to internalize environmental costs.[11]

III. IMPLEMENTATION OF THE CLEAN WATER ACT

A. The National Pollutant Discharge Elimination System

The EPA frequently has lauded its efforts and those of its state partners to protect the nation's waters from point sources regulated under the NPDES permitting program. "Over the nearly thirty years since enactment of the Clean Water and Safe Drinking Water Acts, we have worked together at all levels to make remarkable progress in improving the quality of surface waters and the safety of drinking water."[12]

The admiration is not universally shared. Critics have noted, for example, that "EPA has never been very interested in pursuing a broad interpretation of the Clean Water Act that would construe some of the statute's ambiguities to fit the scope of the nation's water pollution problem."[13] Another states: "Unfortunately, point source

controls have reached the limits of their effectiveness, yet water quality remains ubiquitously substandard nationwide. While America's rivers and harbors no longer catch fire, thousands of waterways fail to meet water quality standards despite point source regulation."[14]

The nation's remaining water quality problems are varied, ranging from runoff from farms and ranches, city streets, and other widely distributed sources to metals (especially mercury), organic and inorganic toxic substances discharged from factories and sewage treatment plants, as well as numerous nonpoint sources.

Whatever limited success the Act has enjoyed is due almost entirely to Federal and state efforts to apply the NPDES program to control point sources. Inadequate nationwide data make it difficult to assess the scope of the remaining water quality issues.

In 2000, the latest year for which data are available, EPA concluded from an extremely narrow examination of the nation's waters that only 61 percent of assessed river and stream miles; 54 percent of assessed lake acres; 49 percent of assessed estuarine square miles; and 22 percent of assessed Great Lakes shoreline miles supported the water quality standards evaluated.[15]

B. Total Maximum Daily Loads

The Total Maximum Daily Load (TMDL) program languished for decades. Despite the mandate in the Act, after 30 years, there are still more than 22,000 impaired waters nationwide, with an estimated 48,000 individual impairments in these water bodies, according to the EPA.[16] The states, who have been delegated to implement the TMDL program under EPA oversight, have generally failed to carry out their section 303(d) duties.[17]

> The TMDL provision . . . is a relic of the previous strategy that calls for states to manage pollution loading into waterways that, despite point source regulation, do not meet water quality standards. With a few exceptions, the states have consistently bowed to political pressure and not established TMDLs. In addition . . . EPA had virtually ignored its mandate to evaluate state TMDLs.[18]

The program was reinvigorated in the 1980's and 1990's after environmental groups began making use of the Act's citizen suit provisions to go to court to force EPA and the states to speed the approval of TMDLs. Because the Act requires EPA to develop a priority list for the state and make a Federal TMDL determination if a state fails to set TMDLs for its impaired water bodies, the suits met an initial round of judicial successes.

Numerous judicial rulings employed the doctrine of "constructive submission" to require the EPA to issue a TMDL when states failed (often for many years) to submit a TMDL for EPA approval. The doctrine held that a state's failure to submit any TMDLs effectively was a "constructive submission" of no TMDLs, thus requiring EPA to act.[19] Lately, however, environmentalists have found a less friendly reception at the courthouse. In a recent shift from earlier decisions, at least two Federal appellate courts have narrowed the doctrine to situations in which a state clearly refuses to adopt a TMDL and the EPA delays action unreasonably.[20] The burden of conclusively proving Federal and state obduracy is now "nearly insurmountable."[21]

C. Water Quality Trading

In January 2003, EPA sought to ration water pollution in U.S. watersheds. It adopted a new "Water Quality Trading Policy" designed, in part, to move away from top-down regulations and to establish a market-based program by which state and tribal governments may attain the required TMDLs for their impaired water bodies.[22]

> [M]arket-based approaches such as water quality trading provide greater flexibility and have potential to achieve water quality and environmental benefits greater than would otherwise be achieved under more traditional regulatory approaches. . . . [T]he policy is intended to encourage voluntary trading programs that facilitate implementation of TMDLs, reduce the costs of compliance with CWA regulations, establish incentives for voluntary reductions and promote watershed-based initiatives.[23]

The modified "cap-and-trade" policy focuses on total emissions of nutrients and sediment in a watershed. It caps total pollutant emissions and encourages pollution reductions through the trading of nutrients and sediment from point and nonpoint sources. Trades of other pollutants are possible, but the Agency will oppose any

trades involving persistent bioaccumulative toxics in the absence of evidence that such a trade would achieve "a substantial reduction" of the pollutant.

The Water Quality Trading Policy is similar to the program for sulfur dioxide emissions established under the Clean Air Act Amendments of 1990. In title IV, Congress authorized EPA to create a tradable emissions market for sulfur dioxide (SO_2). The SO_2 program produced a market for pollution permits (allowances) in order to reduce emissions from older, less efficient electric generating plants. The CAA Amendments established a cap-and-trade system whereby the government capped emissions from generating units at each plant. (Many plants have more than one generating unit subject to the cap.)

In general, an ambient pollution permit for a given environmental receptor (air, water, or land) gives the holder the right to emit a pollutant at any location, provided that the incremental pollution emitted into the specific receptor does not exceed the permitted amount. The marginal savings to the permit holder should equal the permit price. When the price of a permit is greater than the savings from releasing the pollutant, the allowance holder will try to sell some allowances and emit fewer pollutants.

Theoretically, allowance trading creates more flexibility than the standard command-and-control policies in the reduction of pollutants. The increased efficiency resulting from a tradable permit system potentially allows environmental regulators to tighten emission standards, resulting in less pollution while still holding costs at their initial level.

A central feature of any emissions trading program is that it shifts the burden of designing and locating pollution controls from the government to industry. Finally, three points in determining the economic significance of pollution allowances must be kept in mind:

- A market equilibrium exists in the buying and selling of ambient pollution permits for any initial issuance of permits.
- Emissions from each source in a permit market equilibrium are efficient (the least costly way of attaining the efficient level of pollution for each environmental receptor) no matter how the permits are initially distributed.
- If the price of the permits in equilibrium equals the marginal damage from pollution, economic efficiency has been obtained.[24]

The CAA Amendments granted allowance holders with a surplus of credits a Federal license to release one ton of SO_2 emissions or to sell the allowances to another generating unit. The allowances transfer pollutant abatement from high-cost generating units to ones that cost less, thus improving economic efficiency.

Under the Amendments, owners of existing generating units are given fixed numbers of tradable allowances each year following rules that depend primarily on historic emissions and fuel use. Each allowance entitles its holder to emit one ton of SO_2. A small number of additional allowances are auctioned annually by the EPA, with the revenues rebated to utilities roughly in proportion to their allowance allocations.

New units must buy needed allowances from existing units or at the EPA auctions. Each covered generating unit must deliver to EPA valid allowances sufficient to cover each year's emissions within 30 days of year's end or incur serious penalties. Allowances can be bought or sold without restrictions to cover emissions from any generating unit in the U.S.[25] The overall amount of SO_2 released by all units remains the same as long as the number of permits does not increase.

Opinion among economists as to the supposed superiority of the cap-and-trade system is divided, however. Command-and-control regulations may be more protective and more cost-effective if they result in reductions in environmental pollutants below the standard set in the regulations. This "over control" may make command-and-control policies more expensive—and more efficient.[26]

"The evidence is ambiguous as to whether marketable permits have stimulated any more innovation in pollution control than the command-and-control technological restrictions. Marketable permits have proved to be administratively cumbersome."[27]

Under the 2003 Water Quality Trading Policy, emissions of sediment and nutrients are to be capped in the form of the waste load established under a TMDL for point and nonpoint sources. For water bodies or watersheds for which there are no TMDLs at the time of the trade the caps are implied, according to EPA.

In watersheds with approved TMDLs, the watershed itself effectively will be treated as if it were a more traditional point source under the Policy; in watersheds without a TMDL at hand, the task of establishing regulatory baselines in order to determine the allowances to be traded will be exceedingly difficult in the absence of good data on total emissions of the covered pollutants.

It is this feature of the new Water Quality Trading Policy—the attempt for the first time to measure and regulate emissions from nonpoint sources within an entire watershed with "implied" caps—that holds the greatest challenge for the Agency. Almost certainly, the regulation of these widespread regional pollutants promises to be difficult, as the EPA concedes in its January announcement.[28]

IV. POLICY CONSIDERATIONS FOR THE SUBCOMMITTEE

A. The Subcommittee Should Consider Legislation to Establish a Water Quality Trading Program at EPA

EPA has established the Water Quality Trading Policy without explicit congressional authorization. Although the Agency claims that the Policy is supported by the existing Clean Water Act, this point is at least arguable. EPA established its air quality trading program in 1974, but Congress did not codify Agency practices until 1990. In the absence of statutory authority, such a lengthy deferral in establishing a clear congressional role for pollutant trading under the Clean Air Act postponed the ecological reckoning by many years years in which independent analysts raised serious questions about the environmental worth of the Agency's air quality trades.[29]

To eliminate any doubts as to the legality and efficacy of the program, Congress should enact enabling legislation within the Clean Water Act. The legislation should contain explicit safeguards and a strong and continuing oversight role for Congress, including the use of regular audits of the water quality trading program by the General Accounting Office (GAO) and independent analyses of its utility by the Congressional Budget Office (CBO).

B. Congress Must Monitor the EPA Water Quality Trading Program Closely

Cap-and-trade programs generally have reduced the regulatory burden on industry and increased its welfare, but they have not had large or unusually positive effects on the environment. They merely place a limit on total emissions of a given pollutant in a given area, and then allow firms that emit this pollutant to trade excess emissions allowances (each allowance entitles the user to emit a certain amount) with each other and with other third-party traders. These types of programs can be contrasted with command-and-control programs, which tend to be more prescriptive and more expensive for industry, requiring regulated units to install various types of pollution-control equipment.[30]

It is important to remember, however, that emissions trading programs are heavily dependent upon historic emissions data. The permits are not simply a means of improving economic efficiency for polluters or for abolishing the standard technological controls; they are meant to ration the release of pollutants governed by the allowances into the ambient environment based upon well established past practices.

Congress needs to maintain a close watch on the EPA Water Quality Trading Policy as it evolves. There are enough uncertainties associated with this particular policy, especially its unique approach to the trading pollutants from area sources, that it must be carefully overseen.

Among the issues that need to be carefully assessed are the timing of the permits, knowing how the monitoring data are to be obtained, and determining the appropriate government inspection schedule. Penalties for violating the permit must be greater than the permit price so that producers will stay within the rules of the market.

It is especially important for Congress to assess the marketable permit system for water bodies for which no TMDL has been approved early in the process. Without hard data on historic emissions within a watershed, it will be extremely difficult for the EPA to measure the amount of nutrients and sediment to establish in the initial permit issuance. Congress must insist on the best data available or consider prohibiting trades in non-TMDL watersheds.

NOTES

[1] 33 U.S.C.A. 1251 et seq. (West 2003).

[2] William L. Andreen, The Evolution of Water Pollution Control in the United States—State, Local, and Federal Efforts, 1789–1972: Part II, 22 Stan. Env. L.J. 215, 216 (2003).

[3] William H. Rodgers Jr., Environmental Law 248 (2d ed. 1994).

[4] 33 U.S.C.A. §§ 1311(a), 1362(12) (West 2003).

[5] *San Francisco BayKeeper* v. *Whitman*, 297 F.3d 877, 880 (9th Cir. 2002).

[6] See Id.

[7] Jim Vergura and Ron Jones, The TMDL Program: Land Use and Other Implications, 6 Drake J.Agric. L. 317, 320 (2001) (citations omitted).

[8] Kalman Goldberg, the Market System 57 (2000).

[9] Louis Kaplan and Steven Shavell, Fairness Versus Welfare, 114 Harv. L. Rev. 961, 977 (2001).

[10] Paul Hawken et al., Natural Capitalism (1999). ("[H]umankind is facing a historic juncture: For the first time, the limits to increased prosperity are due to the lack not of human-made capital but rather of natural capital.")

[11] David Sohn and Madeline Cohen, From Smokestacks To Species: Extending The Tradable Permit Approach From Air Pollution To Habitat Conservation, 15 Stan. Envtl. L.J. 405, 408 (1996) (footnote omitted).

[12] Statement of G. Tracy Mehan III, Assistant Administrator for Water, U.S. EPA, before the Subcommittee on Water Resources and Environment, Committee on Transportation and Infrastructure, U.S. House of Representatives, Feb. 27, 2003, at *http://www.epa.gov/water/speeches/022703tm.html* (last visited Sept. 11, 2003).

[13] Michael C. Blumm and William Warnock, Roads Not Taken: *EPA* vs. *Clean Water,* 33 Envtl. L. 79 (2003) (concluding that the Agency "has failed miserably" to carry out the point and nonpoint source control programs in the Act due to political expediency).

[14] Debbie Shosteck, *Pronsolino* v. *Marcus*, 28 Ecology L.Q. 327, 328–329 (2001) (footnotes omitted).

[15] Environmental Protection Agency, 2000 National Water Quality Inventory Report to Congress ES–5 (2002), at *http://www.epa.gov/305b* (last visited Sept. 11, 2003) Less than half of all U.S. waters were assessed in 2000. States assessed 19 percent of the nation's total river and stream miles; 43 percent of its lake, pond, and reservoir acres; 36 percent of its estuarine square miles; and 92 percent of Great Lakes shoreline miles.

[16] Environmental Protection Agency, National Section 303(d) List Fact Sheet, at *http://oaspub.epa.gov/waters/national—rept.control* (last visited Sept. 11, 2003). Approximately 9,100 separate TMDLs nationally covering the more than 22,000 impaired water bodies have been completed since 1972. Indeed, most of them have been completed only since 1996. Id.

[17] See U.S. General Accounting Office, Clean Water Act: Proposed Revisions to EPA Regulations to Clean Up Polluted Waters (2000). ("[State] compliance with existing TMDL regulations has been problematic, and future compliance in the absence of the proposed regulation [of 2000] is uncertain . . .").

[18] Shosteck, Pronsolino supra note 14, at 330.

[19] See, e.g., *Scott* v. *Hammond,* 741 F.2d 992, 998 (7th Cir. 1984) (holding that the Clean Water Act "undoubtedly imposes mandatory duties on both the states and the EPA"); *Alaska Center for the Environment* v. *Reilly,* 762 F. Supp. 1422, 1429 (1991) ("Section 303(d) expressly requires the EPA to step into the states' shoes if their TMDL submissions or lists of water quality limited segments are inadequate.") aff'd sub nom. *Alaska Center for the Environment* v. *Browner,* 20 F.3d 981 (9th Cir. 1994); *Defenders of Wildlife* v. *Browner*, 909 F. Supp. 1342 (1995) (same); *Natural Resources Defense Council* v. *Fox,* 909 F. Supp. 153 (1995) (same); *Sierra Club* v. *Hankinson,* 939 F. Supp. 865 (1996) (same); *Raymond Profitt Foundation* v. *EPA*, 930 F. Supp. 1088 (1996) (same); *Idaho Conservation League* v. *Browner*, 968 F. Supp. 546 (1997) (same).

[20] See San Franscisco Baykeeper supra note 5, at 883 (holding that, because the State of California had submitted at least 18 TMDLs for pollutants received by waters designated as WQLS and had established a schedule for completing its remaining TMDLs, the constructive submission doctrine, under which complete failure by state to submit TMDLs was treated as decision not to submit TMDLs, did not apply); see also *Hayes* v. *Whitman,* 264 F.2d 1017, 1023 (10th Cir. 2001) ("Only upon [a] determination that the states' inaction was so clear as to constitute a 'constructive submission' of no TMDLs would the EPA then incur a nondiscretionary duty to approve or disapprove the constructive submission.").

[21] James R. May, Where The Water Hits The Road: Recent Developments in Clean Water Act Litigation, 33 Envtl. L. Rep. 10,369 (2003).

[22] Environmental Protection Agency, Water Quality Trading Policy; Issuance of Final Policy, 68 Fed. Reg. 1608 (Jan. 13, 2003).

[23] Environmental Protection Agency, water quality trading policy 1–2 (Jan. 13, 2003), at http://www.epa.gov/owow/watershed/trading/finalpolicy2003.html (Last visited Sept. 10, 2003).

[24] Charles C. Kolstad, Environmental Economics 163 (2000).

[25] Richard Schmalensee et al., An Interim Evaluation of Sulfur Dioxide Emissions Trading, 12 J. Econ. Persp. 53 (1998). See also Susanne M. Schennach, The Econom-

ics of Pollution Permit Banking in the Context of Title IV of the 1990 Clean Air Act Amendments, 40 J. Envtl. Econ. and Mgmt. 189 (2000).

[26] See W.E. Oates et al., The Net Benefits of Incentive-Based Regulation: A Case Study of Environmental Standard Setting, 79 Am. Econ. Rev. 1233 (1989).

[27] Nick Hanley et al., Environmental Economics in Theory and Practice 88 (1997).

[28] See 68 Fed. Reg. at 1612.

[29] See, e.g., Robert W. Hahn and Gordon L. Hester, Where Did All the Markets Go? An Analysis of EPA's Emissions Trading Program, 6 Yale J. on Reg. 109, 151 (1989) (concluding that, after 15 years of air emissions trading, the program had provided billions of dollars worth of pollution-control savings to industry, but also determining that the EPA-designed program had had a negligible effect on the environment).

[30] The United States is not the only Nation to experiment with cap-and-trade permits for pollutants from area sources. In 2001, the European Union established a cap-and-trade program for governing greenhouse gas emissions among EU countries. See Michael J–H. Smith and Thierry Chaumeil, Greenhouse Gas Emissions Trading within the European Union: An Overview of the Proposed European Directive, 13 Fordham Envtl. L.J. 207 (2002).

STATEMENT OF ROBIN GREENWALD, CLINICAL PROFESSOR OF LAW, RUTGERS SCHOOL OF LAW, NEWARK, NJ; FORMER ASSISTANT CHIEF, ENVIRONMENTAL CRIMES SECTION, DEPARTMENT OF JUSTICE; ASSISTANT U.S. ATTORNEY, EASTERN DISTRICT OF NEW YORK

Mr. Chairman, Mr. Ranking Member, Members of the Committee, thank you for considering my comments on the oil industry's proposal to amend Section 309 of the Clean Water Act to require human endangerment as a prerequisite for criminal negligence. Based on my experiences spanning more than 10 years prosecuting environmental crimes cases, including prosecuting negligent Clean Water Act cases, I am submitting this written testimony in opposition to the proposed legislative amendment and to encourage the Committee to reject its proponents' "smoke and mirrors" argument that Section 309 of the Clean Water Act impedes safety investigations conducted by the National Safety Transportation Board. Recent decisions by the Ninth and Fourth Circuit Courts of Appeals have not changed the standard for prosecuting negligent Clean Water Act cases and, to date, Section 309 has not impeded NSTB investigations.

In the cloak of concern for comprehensive NSTB investigations following oil spills, the oil industry is pressuring Members of Congress from oil-rich states to weaken substantially an important, and sparingly used, Clean Water Act criminal provision, Section 309 of the Clean Water Act, which carries misdemeanor penalties for negligently violating the Clean Water Act.[1] In fact, under Federal law, section 309 has not interfered and should not interfere with NSTB investigations, and in those precious few cases in which a negligent CWA criminal investigation and a NSTB investigation are proceeding simultaneously, there are procedures available, when appropriate, to ensure that an important and time-sensitive safety concern is fully and expeditiously investigated.

The recent interest in this statutory amendment appears to be the prosecutions of two negligent CWA cases, *United States* v. *Hanousek*[2] and *United States* v. *Hong*[3]. Neither of these cases, however, represents a departure from the type of negligent CWA prosecutions brought by the Department of Justice since Congress amended the Clean Water Act in 1987 to add Section 309, nor do the decisions affirming the convictions in Hanousek and Hong constitute a departure from well-established criminal negligence law. In each of these cases, neither defendant was prosecuted for what was a simple "accident", as the oil industry suggests. Indeed, in the case of an "accident" that results from conduct that was reasonable under the circumstances, the type of conduct to which the oil industry refers, no criminal liability would attach under Section 309. It is only when a person causes an event that violates the Clean Water Act, such as a catastrophic oil spill, as a result of his or her failure to exercise the care that a reasonable person would have taken

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[1] In an article by two former chiefs of the Department of Justice, Environmental Crimes Section, Ronald Sarachan and Steven Solow, the authors undertake a statistical analysis of the total number of negligence based Federal environmental crimes prosecutions compared to the total number of Federal environmental crimes prosecuted over a 10-year span, from 1987 to 1997. In total, of the 1,436 environmental criminal prosecutions during that decade, only 86, or approximately 6 percent, of the prosecutions were negligence cases.

[2] 176 F.3d 1116 (9th Cir. 1999), cert. denied, 528 U.S. 1102 (2000).

[3] 242 F.3d 528 (4th Cir. 2001), cert. denied, 112 S.Ct. 60 (2001).

under similar circumstances that the person is subject to negligent CWA prosecution. This is precisely the type of criminally negligent conduct that occurred in the events leading up to the Clean Water Act criminal violations in the Hanousek and Hong cases, and it is the very type of criminal negligence prosecutions Congress contemplated when it enacted Section 309.

A review of the facts in Hanousek and Hong illustrate these points. In Hanousek, the defendant was engaged in rock blasting operations adjacent to what defendant knew was an old pipeline. Hanousek's predecessor had created a protective work area around the blasting operations to ensure that the pipeline was not compromised during the blasting operations. When Hanousek became the manager of the operations, with full knowledge of the pipeline's proximity to the blasting operations, he stopped protecting the pipeline. As a result, the pipe broke when workers drove over the pipeline with a backhoe. To make matters even worse, well before Hanousek knew the type of enforcement case the government was contemplating, Hanousek mislead government investigators and hid pieces of the pipeline from investigators. Clearly, the break of the pipeline here was not an unavoidable accident, and Hanousek did not mislead investigators because he knew they were investigating him for criminal negligence. Had Hanousek taken the care that the former manager of the blasting operations took to protect the pipeline, the pipeline would not have broken and Hanousek would not have been subjected to criminal prosecution. It was Hanousek's failure to exercise the care that a reasonable person would have taken to protect the pipeline under the circumstances, and his subsequent efforts to mislead the government, that resulted in his conviction.

The defendant in Hong acted with the same utter disregard for the environment as did Mr. Hanousek. Hong acquired wastewater treatment facilities in 1993. Two years later, Hong inquired about the purchase of a carbon-filter treatment system for one of his facilities, which lacked a wastewater treatment system altogether. The seller of the system told Hong that the treatment system he was considering was not appropriate for completely untreated wastewater; rather, it was designed only for the final step in the wastewater treatment process. Despite this warning, Hong purchased the system and used it as the sole means of treating wastewater. Employees soon complained to Hong that the system was becoming clogged, and soon thereafter Hong's employees began discharging untreated wastewater into the sewer system in violation of the company's discharge permits and in the presence of Hong on several occasions. Certainly Hong's actions that resulted in untreated wastewater being dumped into the sewer system were not the result of an "accident." Hong, knowing full well that the treatment system he installed was insufficient for the use he used it for, did not act as a reasonable person would have acted in a similar situation. Indeed, while Hong's actions could be said to be knowing, warranting a felony prosecution under the Clean Water Act, at a minimum Hong failed to exercise the care to prevent untreated wastewater from being discharged into the sewer system that a reasonable person would have taken in the same situation.

Essentially, Hanousek and Hong do not represent a sea change in negligent Clean Water Act prosecutions; rather, they represent the need for Section 309 to punish the egregious behavior of these defendants whose negligent actions caused environmental damage.

Other noteworthy negligent Clean Water Act prosecutions that involved the discharge of large quantities of petroleum products illustrate further that Federal prosecutors have reserved Section 309 for egregious conduct. For example, in the case of the *Exxon Valdez* oil spill, Exxon of course did not want to lose millions of gallons of product and to spend many times more to remediate the environment. But the "negligent" event that caused one of the worst environmental catastrophes in this country was Exxon's decision to allow a captain with a history of alcohol abuse to navigate the barge in the Prince William Sound. The Colonial Pipeline spill in the Reedy River is another example of an unwanted, tremendous loss of valuable product and an expensive clean-up that was caused by the "negligent" failure to repair a known weak spot in the pipeline that was carrying the petroleum product. Colonial Pipeline, anxious to move product quickly, yet knowing the risks of over-pressuring the pipeline, made the decision to take the risk and move the petroleum product which the pipeline could not withstand, causing the pipeline to burst and spilling nearly one million gallons of products. If the proposed statutory language were part of Section 309, not one of these cases could have been prosecuted for Clean Water Act negligence because no one was injured nor put at risk of death or serious bodily injury.

Just as there is no basis for the argument that recent case law has somehow changed the standard for Clean Water Act criminal negligence, it is similarly not credible for industry to argue the need for this statutory amendment on the basis that Section 309 impedes NSTB investigations. It is highly unlikely that the rewrit-

ing of Section 309 will change a person's decision not to speak to the government after a catastrophic environmental event. Other penalties might still attach to the conduct that caused the catastrophe, and the uncertainty allegedly created now by Section 309's negligence provision will still be present based on the threat of other prosecutions, such as prosecution for knowing Clean Water Act violations or obstruction of justice, just to name a couple.

Moreover, the oil industry's proposed statutory amendment to Section 309 to allow criminal negligence prosecutions only when the result of the violation involves injury or risk of injury to people certainly would not create, in their own words, "an incentive to cooperate in bringing forward information on accident causes", the goal the oil industry claims it seeks to achieve. To the contrary, with its statutory revision, in the most serious of cases when the need for prompt and complete information (i.e., when people are injured or in serious risk of injury) is most important, workers who fear criminal prosecution might assert their 5th Amendment rights, the very right industry fears impeding NSTB investigations under the current version of Section 309. In fact, this concern is really no concern at all, because in a case in which a criminal investigation is proceeding simultaneously with a NSTB investigation, and there is a necessity to speak to a worker who has asserted his 5th Amendment right that trumps the criminal investigation, the government can immunize that worker and compel his cooperation in the NSTB process. There simply is no reason to amend the negligence provision of Section 309 out of fear of what might happen in a future NSTB investigation in which the Department of Justice is investigating a matter at the same time the NSTB is conducting a safety investigation, an event that has occurred many times in the past without conflict.

Supporters of the legislative amendment also emphasize that "accidents" should not be criminally penalized,[4] and history shows that the Department of Justice has not used Section 309 to "turn clean-up efforts and accident assessment procedures into legal minefields." Ironically, supporters of this legislation suggest amending the language of Section 309 to allow criminal prosecutions following an "accident" only when such accidents involve injury or risk of injury to the public. Yet if the real concern is prompt and open cooperation with NSTB investigations following an oil spill, for example, wouldn't the need for a prompt and open NSTB investigation be most important in cases where the public is placed at risk? Why under these circumstances are the proponents of this legislation not concerned with employees' reluctance to speak because of fear of prosecution? The transparency of their argument is evident: this provision is intended to shield the oil industry from criminal CWA negligence for oil spills because most CWA negligence prosecutions result in extreme environmental damage, but not injury to the public.

Finally, there is a practical reason for rejecting oil industry's proposed statutory amendment to Section 309. The negligence provision of Section 309 oftentimes benefits defendants by giving prosecutors a lesser offense to which defendants can plead guilty. Without this provision, prosecutors are left only with charging defendants with a Clean Water Act felony for knowing violations of the Act. Thus, in Hong, for example, where there appears to have been ample evidence of knowing conduct, prosecutors would have no discretion to consider a misdemeanor charge for his conduct if the oil industry prevails and, instead, could only charge him with a Clean Water Act felony. Surely this is a result that not even the industry advocating for change desires.

[4] The emphasis placed on "accident" is obvious given the fact that in the context of oil spills the pollutant discharged into the—water petroleum product—has great value and no petroleum company or transporter of petroleum products want to spill valuable product, unlike other Clean Water Act prosecutions, such as Hong where the discharge is not a product but a waste. But the events that are subject to prior negligence Clean Water Act prosecutions are far from "accidents" as that word is commonly used. Merely because the defendant in an oil spill prosecution never intended nor wanted to discharge the oil does not obviate the facts that lead up to the spill that constitute a deviation from the care that a reasonable person would have exercised in a similar circumstance.

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ARTICLES

Criminal Negligence Prosecutions Under the Federal Clean Water Act: A Statistical Analysis and an Evaluation of the Impact of *Hanousek* and *Hong*

by Steven P. Solow and Ronald A. Sarachan

What can we learn about the use of the criminal negligence provisions of the federal Clean Water Act (CWA) by reviewing prior environmental crimes cases brought by the federal government? In an effort to answer that question, the authors have completed the first ever statistical analysis of all federal criminal negligence prosecutions brought since the CWA Amendments of 1987 created separate felony and negligence provisions. The results of that analysis are described below. It reveals clear patterns to past charging decisions of federal prosecutors, and suggests likely future trends.

Virtually all federal pollution control statutes contain criminal enforcement provisions.[1] Generally, the mental state that the government must prove for a conviction is that the defendant acted "knowingly," that is, the violative acts must be voluntary and intentional and not the result of an accident or mistake of fact.[2] However, in addition to crimes based on knowing conduct, the CWA also makes certain violations a crime if committed negligently.[3] The potential reach of these criminal negligence provisions is extremely broad.[4] For example, any violation of a national pollutant discharge elimination system (NPDES) permit, or spill of a pollutant into waters of the United States attributable to negligent operation, training, or supervision, may theoretically meet the elements of the crime. The government has not applied these provisions that broadly, and the question therefore becomes: why are certain negligent violations of the CWA selected for criminal prosecution and others not?

The importance of answering this question is great. Although criminal negligence under the CWA is only a misdemeanor, it is still a federal criminal conviction that can result in severe consequences, including a sentence of up to one

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1. Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. §136*l*(b), ELR STAT. FIFRA §14(b); Toxic Substances Control Act (TSCA), 15 U.S.C. §2615(b), ELR STAT. TSCA §16(b); Surface Mining Control and Reclamation Act (SMCRA), 30 U.S.C. §1268(e), (g), ELR STAT. SMCRA §518(e), (g); Rivers and Harbors Act of 1899 (Refuse Act), 33 U.S.C. §411; Clean Water Act (CWA), 33 U.S.C. §1319(c), ELR STAT. FWPCA §309(c); Ocean Dumping Act, 33 U.S.C. §1415(b); Act to Prevent Pollution From Ships (APPS), 33 U.S.C. §1908(a); Safe Drinking Water Act (SDWA), 42 U.S.C. §§300h-2(b), 300h-3(c), 300i-1, ELR STAT. SDWA §§1423(b), 1423(c), 1432; Noise Control Act (NCA), 42 U.S.C. §§4910(a)(1), 4912(c); Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §6928(d), (e), (f), ELR STAT. RCRA §3008(d), (e), (f); Clean Air Act (CAA), 42 U.S.C. §7413(c), ELR STAT. CAA §113(c); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9603(b), ELR STAT. CERCLA §103(b); Emergency Planning and Community Right-To-Know Act (EPCRA), 42 U.S.C. §11045(b)(4), ELR STAT. EPCRA §325(b)(4); Hazardous Materials Transportation Statute (HMTS), 49 U.S.C. §5124.

2. *See, e.g.*, United States v. Weitzenhoff, 35 F.3d 1275, 24 ELR 21504 (9th Cir. 1994) (CWA felony), *cert. denied*, 513 U.S. 1128 (1995); United States v. Laughlin, 10 F.3d 961, 24 ELR 20221 (2d Cir. 1993) (CERCLA, RCRA), *cert. denied*, 114 S. Ct. 1649 (1994); United States v. Buckley, 934 F.2d 84, 21 ELR 21113 (6th Cir. 1991) (CERCLA); United States v. Reilly, 827 F. Supp. 1076, 24 ELR 20097 (D. Del. 1993) (Ocean Dumping Act); United States v. Corbin Farm Servs., 444 F. Supp. 510, (E.D. Cal.) (FIFRA), *aff'd*, 578 F.2d 259 (9th Cir. 1978). The precise meaning of the knowledge requirement in the different environmental statutes is the subject of much litigation. *See, e.g.*, United States v. Tomlinson, No. 99-30020, 1999 WL 511496 (9th Cir. July 16, 1999) (unpublished opinion) (CAA); United States v. Ahmad, 101 F.3d 386, 27 ELR 20557 (5th Cir. 1996) (CWA).

3. 33 U.S.C. §1319(c)(1), ELR STAT. FWPCA §309(c)(1). The only other environmental statute that contains a criminal negligence provision is the negligent endangerment provision of the CAA. 42 U.S.C. §7413(c)(4), ELR STAT. CAA §113(c)(4). The authors are aware of only one case charging this CAA provision, and the provision is not discussed in this Article.

4. The first paragraph of the CWA's criminal negligence provisions makes it a crime to negligently violate certain specified sections of the CWA, any national pollutant discharge elimination system (NPDES) permit condition or limitation, any requirement of approved pretreatment programs, or any requirements in wetland permits for dredged or fill material. 33 U.S.C. §1319(c)(1)(A), ELR STAT. FWPCA §309(c)(1)(A). Thus, for example, it is a crime to negligently discharge a pollutant from a point source into waters of the United States without a permit or in violation of an NPDES permit limit. The second paragraph of the criminal negligence provisions makes it a crime to negligently introduce a pollutant or hazardous substance into a sewer system or publicly owned treatment works that causes the treatment works to violate its discharge permit. *Id.* §1319(c)(1)(B), ELR STAT. FWPCA §309(c)(1)(B).

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Concerns over the possibility of ill-considered use of what could be called the "negligent supervision doctrine" may have several roots. First, in the context of environmental crime prosecutions (as in other white-collar crime offenses), it has been the stated policy of prosecutors in the past several administrations to seek to hold liable the highest level culpable officials of an entity that commits criminal violations.[19] This policy is premised on the theory that when those in the positions of greatest power and authority in an entity are held responsible for violations, the deterrence impact of such prosecutions is the greatest.[20] Moreover, a recent U.S. Department of Justice (DOJ) policy on corporate crime has made explicit that prosecution of a corporation is not a substitute for charging individual directors, officers, employees, and shareholders who are criminally culpable.[21] Second, it has been the long-standing view of some members of the defense bar, the bench, and legal academia that the "knowing" standard is itself an overly relaxed standard that gives prosecutors far too much discretion to charge environmental violations as crimes.[22] The decisions in *Hanousek* and *Hong* appear to greatly expand the discretion federal prosecutors already possess.

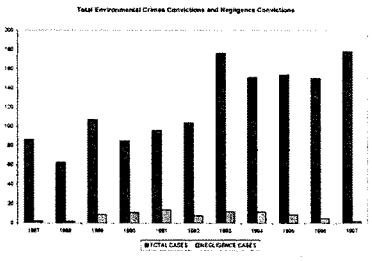
To place *Hanousek* and *Hong* in broader context, this Article turns to the empirical analysis of past criminal negligence prosecutions under the CWA. That analysis reflects a history of very restrained use of the CWA negligence provisions by the government. The Article then returns to *Hanousek* and *Hong* and the question of whether the government's historic approach to CWA negligence prosecutions still provides a reliable indicator of future use of negligence in federal environmental crimes prosecution. The Article then sets forth several reasons why *Hanousek* and *Hong* are unlikely to represent a break with past practice.

A Statistical History of Negligence-Based Prosecutions Under the CWA

The starting point for the statistical analysis is the total number of *negligence-based* federal environmental crimes prosecutions compared to the *total* number of all federal environmental crimes prosecuted from 1987 to 1997. This 11-year period has been used because sufficiently reliable data on the total number of federal environmental crimes prosecutions has not been available for cases after 1997.[23]

Table 1/Graph 1

YEAR	Negligence Cases	Total Cases
1987	2	86
1988	2	63
1989	9	107
1990	11	85
1991	14	96
1992	8	104
1993	12	176
1994	12	151
1995	9	154
1996	5	150
1997	2	178
Totals	86	1,350



19. For a variety of reasons, no change in the U.S. Department of Justice's (DOJ's) policy in this regard is likely. Notably, following the recent disclosures concerning Arthur Andersen, Enron, and Worldcom, President George W. Bush stated that corporate executives will be held personally accountable for corporate law violations. "Our Justice Department will hold *people* accountable," President Bush stated in a speech calling on corporations to be honest and law-abiding. *Bush Issues Call for Honesty in Corporate America*, N.Y. TIMES, June 29, 2002, *available at* www.nytimes.com/2002/06/29/business/29SPEE.html (emphasis added).

20. This study is not the place to address this critical premise regarding the effects of both individual and corporate criminal liability on corporate compliance. As Prof. William Laufer noted before the U.S. Sentencing Commission Symposium on Corporate Crime in September 1995, this is an issue that needs greater research to obtain "objective measures of compliance effectiveness." *See* Proceedings of the Second Symposium on Crime and Punishment in the United States, Corporate Crime in America, *Strengthening the "Good Citizen" Corporation*, U.S. Sentencing Commission, Sept. 1995, at 137. There have been some efforts at empirical work. *See, e.g.*, Jennifer Arlen & Reinier Kraakman, *Controlling Corporate Misconduct: An Analysis of Corporate Liability Regimes*, 72 N.Y.U. L. REV. 687 (1997); Mark Cohen, *Theories of Punishment and Empirical Trends in Corporate Criminal Sanctions*, 17 MANAGERIAL & DECISION ECON. 309 (1996). Many others have approached the issue as a matter of doctrine. *See, e.g.*, V.S. Khanna, *Corporate Criminal Liability: What Purpose Does It Serve?*, 109 HARV. L. REV. 1477 (1996). Given the importance of the issues of corporate and individual criminal liability in the context of regulatory violations, the limited resources committed to empirical work in this area is regrettable.

21. U.S. DOJ, FEDERAL PROSECUTION OF CORPORATIONS (1999).

22. *Compare* Richard Lazarus, *Meeting the Demands of Integration in the Evolution of Environmental Law: Reforming Environmental Criminal Law*, 83 GEO. L.J. 2407 (1995), *with* Kathleen Brickey, *The Rhetoric of Environmental Crime, Culpability, Discretion, and Structural Reform*, 84 IOWA L. REV. 115 (1998).

23. The statistics contained in this Article are based on public case information obtained by the authors. One difficulty in obtaining accurate case counts is that environmental criminal cases are prosecuted by both the DOJ's Environmental Crimes Section and the 93 U.S. Attorneys' offices of the United States and its territories. Some cases are prosecuted by the Environmental Crimes Section alone, some in combination with a U.S. Attorney's office, and some by an individual U.S. Attorney's office alone. Despite this fact, the DOJ lacks a uniform single reporting system for all environmental crimes cases. We believe our compilation is based on the most accurate case counts available. Where we have had questions about the charges or dispositions of individual cases, we have sought to resolve them by direct communication with the prosecutors who handled the cases. We believe that these statistics accurately represent the universe of environmental criminal cases, and include substantially all such cases.

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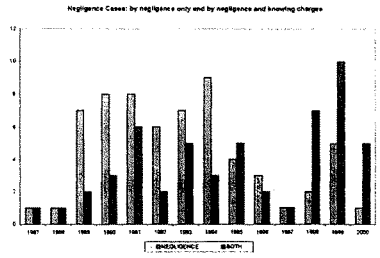
In about one-half of the cases (56 out of 117) at least 1 individual and the corporation were charged. In approximately one-third of the cases (38 out of 117) a corporation only was charged, and in approximately one-fifth of the cases (23 out of 117) only 1 individual was charged. Approximately two-thirds of the negligence cases include individuals as defendants (79 out of 117 or about 68%). That fraction is a little smaller than the current fraction for environmental crimes prosecutions generally.[27]

An important fact revealed by the case data is that many of the negligent cases involved charges and convictions based on both negligence and knowing conduct. The following table and graph give a breakdown of the negligence cases according to whether the convictions were for negligent conduct only or for both negligent (misdemeanor) and knowing (felony) conduct.

Table 4/Graph 4

YEAR	Negligence Only Charges	Both Negligence & Knowing Charges	Total No. of Negligence Cases
1987	1	1	2
1988	1	1	2
1989	7	2	9
1990	8	3	11
1991	8	6	14
1992	6	2	8
1993	7	5	12
1994	9	3	12
1995	4	5	9
1996	3	2	5
1997	1	1	2
1998	2	7	9
1999	5	10	16
2000	1	5	6
Totals	63	53	117



27. For example, according to the U.S. Environmental Protection Agency (EPA), in fiscal year (FY) 1998 73% of its cases included charges against individuals.

Overall, over 45% of the negligence cases involved convictions for both negligent and knowing conduct. In each year, there have been both cases having a combination of negligence and knowing charges and cases charging negligence alone. There may be a trend toward more negligence cases combining negligence and knowing charges, rather than negligence charges alone. For example, from 1989 through 1994, the number of negligence-only cases exceeded the combination negligence and knowing cases every year, in four of those years by ratios of more than two or three to one. However, in the more recent period from 1995 to 2000, the ratios generally reverse, with the number of combined cases exceeding the number of negligence-only cases in four of the six years.

To better understand the 53 combined cases, the data was further broken down by categories of defendant. As the following table shows, in only 10 of the 53 cases were the negligence and knowing charges against the same defendant.

Table 5

YEAR	Corporation/ Felony	Corporation/ Misdemeanor	Single Defendant Charged With Misdemeanor & Felony	Total No. of Negligence Cases With Misdemeanor & Felony
	Individual/ Misdemeanor	Individual/ Felony		
1987	1			1
1988	1			1
1989	2			2
1990	3			3
1991	3		3	6
1992	1	1		2
1993	2	1	2	5
1994	2		1	3
1995	4		1	5
1996	2			2
1997	1			1
1998	6	1		7
1999	5	3	2	10
2000	3	1	1	5
Totals	36	7	10	53

Most of the cases with a combination of knowing and negligence charges involved both corporate and individual defendants. Approximately 36 included corporate felony convictions (knowing conduct) and individual misdemeanors (negligence), while 7 were the reverse, with corporate misdemeanor convictions and individual felonies. The significance of these breakdowns between negligence and knowing charges is examined below.

Finally, as the following table and graph show, of the total number of negligence cases, 104 or approximately 90% were completely resolved by pleas of guilty, while 7 went to trial, and 6 involved multiple defendants and were resolved by a combination of pleas and trials. The percentage of cases

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charge allows the defendant to plead to a misdemeanor rather than a felony. A clear example of a compromise case arises when an individual employee is charged with a CWA felony. Based on hornbook law of corporate liability, as long as the employee acted within the scope of his or her employment and for the benefit of the corporation, the corporation is also guilty of the same felony.[32] However, in a number of cases the government has entered into an agreement permitting the corporation to plead instead to the negligent-based CWA misdemeanor. These cases are captured in Table 5 above.[33]

The fourth category—combination cases—involves a combination of negligent and knowing violations, such as knowing environmental violations, false statements, and obstruction of justice. Unlike the compromise cases where a negligent misdemeanor is charged in lieu of a felony, in the combination cases the negligent misdemeanors are "add-on" charges brought by the government as lesser offenses in cases where the defendants are also facing felony charges. An important consideration here is that the government believes that a felony/knowing violation has occurred and that there is sufficient evidence to proceed on that basis. The negligence add-on charges are roughly analogous to the lesser included offenses commonly seen in other types of criminal cases.

Review of the CWA negligence cases is also enlightening for identifying those categories of cases that do not exist. Significantly, federal prosecutors as a rule have not based prosecutions on a theory of negligent supervision. *Hanousek* and *Hong*, however, break with the past in their reliance on the defendants' negligent supervision. The remainder of this Article examines four factors that inform our assessment of the likely reach of those two cases: a closer factual analysis of *Hanousek* and *Hong*; a comparison of the negligence standard approved of in *Hanousek* with the DOJ's prior position on the appropriate legal standard to be applied to criminal negligence prosecutions under the CWA; the investigative discretion policies of the key federal agencies that investigate the vast majority of federal environmental criminal cases; and the norms underlying the traditional exercise of prosecutorial discretion.

Factual Analysis of *Hanousek* and *Hong*

One reason why *Hanousek* and *Hong* may not auger an overall change in past practice is revealed by a careful review of the factual backgrounds of both cases. Factually, they appear to be well within the heartland of environmental crimes cases that are typically selected for prosecution. The heart of the government's charges in *Hanousek* were actions allegedly taken *after* the spill to falsely conceal its magnitude from the government, and the charges in the indictment included obstruction of justice and destruction of evidence.[34] While the defendant was acquitted of those charges, they help explain why the government viewed the case as criminal. Thus, the *Hanousek* case falls into the fourth category of traditionally charged negligence cases as a case in which the defendant was charged (albeit unsuccessfully) with both knowing- and negligence-based conduct.

In the *Hong* case, the fact finder found that the defendant (despite his lack of a formal corporate title) substantially controlled the operation of the company in question, was personally involved in the actions that led to the violations and knew about the problems that caused the violations, was present when violations occurred and made a conscious decision to refuse to take actions to abate the violations, including denying employee requests for needed equipment to properly filter the company's effluent. It was on the basis of these findings that the Fourth Circuit affirmed his conviction.[35] Given these facts, it seems unlikely that these two cases signal a sea change in the government's overall approach to environmental criminal enforcement.

The DOJ's Position on the Legal Standard for Negligent Violations of the CWA

While the very existence of *Hanousek* and *Hong* may serve as precedent for bringing "negligent supervision" prosecutions, another possibility is that prosecutors will feel emboldened by the *Hanousek* court's affirmation of the simple negligence standard. This would be an understandable conclusion except for the fact that federal prosecutors have long acted on the presumption that simple negligence is the appropriate intent standard for negligent violations of the CWA.

Notably, in one of the first ever federal environmental criminal trials held over 20 years ago, *United States v. Frezzo Bros.*,[36] the government sought and obtained an instruction essentially the same as the one given in *Hanousek*. The district court instructed the jury in *Frezzo Bros.* that "[criminal] negligence is the doing of some act which a reasonably prudent person would not do."[37] This was a simple negligence instruction. The U.S. Court of Appeals for the Third Circuit affirmed the convictions, although it never directly addressed the jury instructions.[38]

Furthermore, the authors' experience as the two prior chiefs of the DOJ's Environmental Crimes Section, and one of the author's earlier experience as an assistant U.S. Attor-

32. *See* United States v. McDonald & Watson Waste Oil Co., 933 F.2d 35 (1st Cir. 1991); United States v. Koppers, 652 F.2d 290, 297 (2d Cir.), *cert. denied*, 254 U.S. 1083 (1982). Corporate vicarious criminal liability will no doubt receive a new burst of attention following the jury instructions provided in the recent case leading to the conviction of the accounting firm Arthur Andersen on charges of obstruction of justice. *See* Tom Fowler, *Andersen Guilty: Verdict Seen as Fatal Blow to Firm*, HOUS. CHRON., June 19, 2002, *at* http://www.chron.com/cs/CDA/story.hts/special/andersen/1456537.

33. *See supra* tbl. 5, column entitled "Corporation/Misdemeanor/Individual/Felony." Conversely, there are other compromise cases in which the corporation has been convicted of a CWA felony based on an employee's conduct, but the employee has entered a plea agreement and pleaded to only the misdemeanor. These cases are included in Table 5, column entitled "Corporation/Felony/Individual/Misdemeanor."

34. While Hanousek was acquitted on a charge of conspiring to provide false information to the U.S. Coast Guard about the spill, his alleged co-conspirator, Paul Taylor, was convicted on two of five counts of making false statements to the Coast Guard. Taylor was acquitted on charges of failing to report a discharge, obstruction, and conspiracy. Taylor's conviction was reversed on appeal on issues unrelated to the negligence standard and after a a subsequent mistrial Taylor plead guilty to one count of negligent discharge of oil (33 U.S.C. §1321(b)(3), ELR STAT. FWPCA §311(b)(3)) and was sentenced to a fine and three years probation.

35. 242 F.3d at 532, 31 ELR at 20510.

36. 461 F. Supp. 266, 9 ELR 20139 (E.D. Pa. 1978), *aff'd*, 602 F.2d 1123, 9 ELR 20556 (3d Cir. 1979), *cert. denied*, 444 U.S. 1074 (1980).

37. Jury Instructions, on file with the authors.

38. 602 F.2d at 1129, 9 ELR at 20559.

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statutes,[46] the severity of criminal process and penalties, and the views and values noted above, can be expected to lead prosecutors to continue to use the CWA's negligence provisions sparingly, notwithstanding *Hanousek* and *Hong*.

Conclusion

Our empirical analysis shows that the government has brought negligence-based CWA prosecutions only in rare and clearly definable circumstances. While *Hanousek* and *Hong* raise the specter of a more aggressive approach, we would temper concerns about expansion of the use of negligence charges with four considerations: (1) the facts of *Hanousek* and *Hong* make their selection for criminal prosecution unremarkable; (2) federal prosecutors have long considered the simple negligence standard to be the appropriate legal standard for CWA negligent violations, meaning that *Hanousek* does not signal an expansion of liability from the prosecutors' point of view; (3) as matters of policy and practice, federal law enforcement agencies have made it their explicit policy to focus limited resources on cases presenting the most egregious behavior and culpable conduct, a trend that is unlikely to change in light of recent events; and (4) the norms underlying the exercise of prosecutorial discretion that have led to the restrained use of negligent charges have not changed.

At the same time, by setting precedents for negligent supervision prosecutions, *Hanousek* and *Hong* may spawn more of the same, and that would be a significant change. All of the factors that have informed prosecutorial decisionmaking in the past should serve as guides for future prosecutions, but they are, of course, only guides. Given the relatively small body of federal environmental criminal prosecutions, it may take only a single case that appears to inappropriately exploit the discretion implicit in *Hanousek* and *Hong* to result in a very different calculus as to the future use of criminal negligence liability under the CWA.

46. Legislatures have enacted, and courts have upheld, numerous criminal statutes based on both negligence and strict liability.

2/20/03

FINAL February 2003

A Pilot for Performance Analysis of Selected Components of the National Enforcement and Compliance Assurance Program

This report provides the results of a pilot OECA Performance Analysis focusing on the NPDES (National Pollutant Discharge Elimination System) "majors"[1] universe, a component of the national enforcement and compliance assurance program. This report was prepared by an ad-hoc team under the direction of the OECA Performance Board and uses the performance-based questions from the OECA "Blue Book."

Workgroup recommendations are in bold type throughout the document, and listed at the end of the document.

Background

The Office of Enforcement and Compliance Assurance (OECA) has begun to implement performance-based management, involving the analysis and use of performance information to improve program management and support decision making. There have been several significant accomplishments to date, including two that relate directly to this analysis. The first is the establishment of the OECA Performance Board. The Board is charged with developing and implementing a performance-based management approach for the national enforcement and compliance assurance program. The Board developed a template for analyzing the performance of selected components of the national enforcement and compliance assurance program, and is overseeing this pilot analysis.

The second accomplishment is the development of *Using Performance Measurement Data as a Management Tool* (Office of Compliance, OECA, June 10, 2002) - referred to as the "Blue Book." The Blue Book provides a framework for an annual comprehensive analysis of the national enforcement and compliance assurance program, which goes beyond the numbers, based on an in-depth evaluation of data, investigation into the story behind the data and focused discussions with headquarters, regional and state experts. It is organized around six key performance-based questions. This pilot analysis addresses the four blue book questions for which data exist for NPDES majors (see questions below).

There are three reasons why the NPDES majors universe was chosen as the first pilot for the performance analysis. First, OECA has more enforcement data for NPDES majors than for other programs/universes. Second, majors represent a very high percent of overall NPDES permitted

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[1] The NPDES "majors" universe is composed of municipal, industrial, and federal facilities permitted to discharge waste water directly to surface waters, and are identified by EPA as "major" dischargers based on design flow or a qualifying permit rating score. Identification as a major triggers certain Agency requirements, including: 1) entry of detailed permit, compliance, and enforcement data into the Permit Compliance System (PCS) database (which provides direct monitoring data and automatic violation detection); 2) inclusion in the universe of major facilities whose effluent and reporting violations can result in a designation of significant non-compliance (SNC); and 3) regular reporting and tracking of any reportable non-compliance via the quarterly non-compliance report (QNCR).

direct discharge releases. Third, data from other ongoing efforts indicate that there are noncompliance issues.

Purpose

The purpose of this analysis is to provide senior managers of the enforcement and compliance assurance program with a tool for managing the NPDES majors program based on performance data. The analysis is intended to address key questions and highlight major issues about the NPDES majors program. The development of future analyses on other program areas over time will provide a broader perspective on the significance of the NPDES majors' noncompliance and resulting contribution to environmental degradation. Such a perspective can inform and support management decisions on major issues such as the redirection of resources across programs. Individual program analyses such as this one, however, are more likely to generate focused management discussions within the individual program area such as specific dialogues with regional and state partners on: whether or not increased enforcement or compliance assistance in certain parts of the regulated universe is warranted, how to improve data quality to better inform decisions concerning program direction, and exploration of the root causes of noncompliance in particular regions or states.

Scope

This report presents an analysis of national, regional, and state enforcement and compliance assurance measurement data for NPDES majors. The analysis focuses largely on enforcement activity because of the lack of measurement data for majors on compliance incentives, compliance assistance, capacity building, responses to citizen complaints, and outcomes from compliance monitoring. The enforcement data used in this analysis were pulled from EPA databases between May and September 2002.

This analysis addresses the following four areas of performance:

1. Contributing to the Goal of Protecting Human Health and the Environment Through Our Actions and Strategies

2. Achieving Appropriate Levels of Compliance in Key Populations

3. Achieving Appropriate Levels of Enforcement and Compliance Assurance Activity in the Regulated Community

4. Changing the Behavior of the Regulated Community in Ways That Lead to Improved Environmental Performance

Appendix A contains the compliance data used in the analysis, Appendix B contains the enforcement activity data used in the analysis, and Appendix C contains the environmental indicators data used in the analysis. Data used to support the analyses are summarized under each question.

Limitations

There are a number of reasons why an analysis of NPDES majors alone has limitations. Some of the limitations are explained below.

Limited Definitions

Significant parts of the NPDES regulated universe are not included in the majors definition. The guidance defining NPDES "major" and SNC for the NPDES program was developed over 10 years ago and does not address a universe of discharging facilities that EPA presently has identified as its enforcement priority - wet weather flows. Therefore, an analysis of NPDES majors does not cover some of the most environmentally significant noncompliance components of the water program.

Comparison to Other Programs

For a variety of technical and regulatory reasons, more data are available for CWA majors than for other programs (e.g. Clean Air and RCRA). EPA has extensive effluent monitoring information for NPDES major permittees. Due to the amount and completeness of the available data, NPDES majors are one of the few discrete regulated universes for which EPA can calculate noncompliance rates.

Data Quality and Availability

Despite the fact that there are a lot of data for NPDES majors, data quantity and quality are still limiting factors. Limited data exist for NPDES majors for compliance incentives, assistance, or outcomes from compliance monitoring. Data on outputs and outcomes from compliance incentives and assistance, and outputs from compliance monitoring, are not broken out for NPDES majors, but are reported only by media and MOA priority area. The workgroup believes that data on these compliance activities for NPDES majors would improve our ability to analyse the performance of the program, but recognizes the associated reporting burden to states. **The workgroup recommends that senior managers evaluate the need for data on these compliance activities for NPDES majors given the resource implications for states.**

The data that we have for enforcement is relatively plentiful, but there are known problems with the data, and undoubtedly other unknown problems. For example, states are not required to report some of the data that would be ideal for answering certain key questions (e.g. data on penalties, injunctive relief, and pounds of pollutants reduced). There is a commitment through the PCS modernization effort for states to submit penalty data, but the effective date of this data system has been postponed. **The workgroup recommends accelerating the schedule requiring that states submit penalty data to PCS.**

Additionally, EPA has determined that there are particularly significant data entry problems in Wisconsin, Nevada, Hawaii, and Arizona. These states do not show enforcement action data in PCS. Data regarding inspections performed by California do not appear to be entered into PCS. More information on known data problems can be found on the ECHO website at the following URL: www.epa.gov/idea/echo

Table 1 - State and Regional DMR Entry Rates for FY 2001
Shaded boxes are regions and states with DMR entry rates below the national goal of 95%. States and percentages in bold are those below the national average (91%).

Region	Regional DMR Entry Rate	States with DMR Entry Rate below 95%
1	98 %	
2	98 %	

Region	Regional DMR Entry Rate	States with DMR Entry Rate below 95%
3	93 %	**DC - 72 %**
4	98 %	AL - 94 %
5	96 %	OH - 92 % **WI - 87 %**
6	97 %	NM - 93 % TX - 94 %
7	92 %	**MO - 85 %** **NE - 85 %**
8	97 %	**WY- 89 %**
9	**48 %**	**AZ - 47 %** CA - 41 % **HI - 87 %** NV - 16 %
10	92 %	AK - 93 % **ID - 78 %**
National	91 %	

Averages are based on State data only -territories not included.

A recent audit of FY 2001 data showed that 87% of the inspection information entered by EPA and the states to PCS is accurate.

Data from 3rd quarter 2002 showed a national permit limit entry rate of 91%. Regional rates ranged from 90% - 98% for Regions 1 - 8. Regions 9 and 10 had rates of 46% and 72% respectively.

Compliance Acronyms and Definitions

DMR - Discharge Monitoring Report

CWA SNC - Clean Water Act Significant Noncompliance. Most SNC designations are based on an analysis of Discharge Monitoring Reports (DMRs) that facilities with NPDES permits are required to submit on a monthly basis. The compliance designation of a facility in the PCS database is done using a mathematical formula that takes into account the amount, duration, and frequency of discharges in comparison with permit levels. In some instances, facilities may be manually designated as SNC, even if the PCS data system does not automatically designate them as such. Examples of events that could result in the manual generation of a SNC code for a facility include: unauthorized discharges; failure to meet a construction deadline; failure of a POTW to enforce its approved pretreatment program; failure to meet a construction deadline; failure to file a DMR; filing a DMR more than 30 days late; or violating any judicial or administrative order.

Repeat SNC - Facilities that are in SNC for two or more quarters in a two year period.

Perpetual SNC - Facilities that are in SNC for eight out of eight quarters in a two year period.

Recidivist - Facilities that were previously in SNC that are in SNC again within two years.

RNC - Reportable Noncompliance

◆ 1. Contributing to the Goal of Protecting Human Health and the Environment Through Our Actions and Strategies

The analysis for #1 primarily draws from the environmental indicators data from Appendix C. This analysis also utilizes enforcement and compliance assurance activity data from Appendix B. Regional and state breakdowns of the data in the summary table below can be found in the appendices.

Summary of Data

Table 2 - **Summary of Environmental and Human Health Indicators**
Shaded boxes are levels or trends of concern.

Indicators	Comments on Levels FY 1999 - 2001	Trends FY 1999 - 2001
*Percent of Enf. Actions that Result in Reduction, Elimination, or Treatment of Pollutants	29%, 35% and 46%	17 percentage point increase
Effluent Violations for Toxic Parameters (FY 2001)	14% are <25% exceeded 35% are 20%-99% exceeded 36% are 100%-999% exceeded 13% are >1,000% exceeded	Trend data not available.
Effluent Violations for Conventional Parameters (FY 2001)	25% are <25% exceeded 43% are 20%-99% exceeded 28% are 100%-999% exceeded 5% are >1,000% exceeded	Trend data not available.
Percent of SNCs in 303(d) Listed Waters with a Formal Action in last 2 Years (FY 2001)	23% (compared to 24 % in non-303(d) listed waters)	Trend data not available.
Percent of Repeat SNCs in 303(d) Listed Waters with a Formal Action in last 2 Years (FY 2001)	30% (compared to 27 % in non-303(d) listed waters)	Trend data not available.
Percent of Perpetual SNCs in 303(d) Listed Waters with a Formal Action in last 2 Years (FY 2001)	38% (compared to 32 % in non-303(d) listed waters)	Trend data not available.
Percent of Effluent Violations causing SNC (FY 2001)	25%	Trend data not available.

* These data are reported to docket but there is no way to distinguish which cases are for majors, except where a link can be made to a permit number in PCS. A total of 364 cases were linked to a major permit number in PCS (out of 577 majors with enforcement actions). Therefore, this data represents only a 63% of cases with pollutant reductions for 2001. Additionally, data quality is low because of poor reporting. These data are not reliable for meaningful analysis.

Analysis and Conclusions

There is a lack of data available to determine how enforcement efforts quantitatively contribute to the goal of protecting human health and the environment. There is also a lack of data available to determine what relative quantitative impact violations at major facilities have on

human health and the environment when compared to the NPDES wet weather priority areas. The guidance defining NPDES major and SNC for the NPDES program was developed over ten years ago and does not address the universe of discharging facilities that EPA presently has identified as its enforcement priority - wet weather flows. Therefore, this analysis may not cover some of the most environmentally significant components of the water program. **The workgroup recommends that the definition of SNC for majors be revisited (as Phase II after the current SNC definition for wet weather is complete.)**

To address this performance area, we use data on outputs and outcomes from enforcement (compliance rates, pollutant reductions and permit exceedances) as surrogates for environmental and human health protection. The regulations which define compliance and establish the limits are intended to be protective of human health and the environment, therefore we believe that enforcing them ensures the appropriate level of protection is achieved. We operate under the assumption that our enforcement and compliance assurance activities have a positive impact on human health and the environment, and that more enforcement activity and increased compliance results in more environmental and human health protection.

Cases Resulting in Reduction, Elimination and Treatment of Pollutants

Data on the number and percent of enforcement actions that result in reduction, elimination and treatment of pollutants (pollutant reduction data) is an important tool for estimating the amount of pollution that will not be released into the environment due to enforcement actions.

Pollutant reduction data are not reported to EPA by states. The quality of data for pollutant reductions from EPA actions has been gradually improving but continues to need improvement in accuracy, consistency, and completeness. Recent training efforts on pollutant reduction calculations is expected to have a positive impact on the quality and consistency of the data. FY 2002 data show an increase of 20 percentage points for the percentage of cases with pollutant reductions. This is likely due to increased reporting.

Pollutant reduction data are reported to docket for all CWA enforcement cases and there is no way to distinguish which cases involved majors except where a link can be made to a permit number in PCS. The Information Utilization and Targeting Branch was able to link 364 cases (or 63%) to a major facility permit number in PCS. These data show that between 1999 - 2001 there was a steady increase in the percentage of NPDES enforcement actions against majors that result in pollutant reductions, elimination, or treatment, from 29 % in 1999, to 35% in 2000 and 46 % in 2001. Because these data represent only 63% of the universe of majors with an action, and because the data quality is questionable, it is difficult to draw conclusions. It is likely that data quality has improved over time and this has created the apparent upward trend.

Permit Exceedances and Effluent Violations

Data for 2001 show that 49% of NPDES permit toxic effluent limit exceedances were greater than 100% over permitted levels, and 13% of exceedances were greater than 1,000% over permitted levels. Exceedances are higher for toxic pollutants than for conventional pollutants. Data for FY 2001 show that 33% of conventional exceedances were greater than 100% over permitted levels, and 5% of conventional exceedances were greater than 1,000% over permitted levels. Toxic water quality-based permit limits are often very stringent, increasing the likelihood of high exceedances. Some EPA staff believe that some portion of the most extreme exceedances may be the result of un-achievable water quality based limits, due to technological limitations or cost. While such limitations may be real, the workgroup recognizes that the limits are set to be protective of human health and the environment. **The workgroup recommends an OECA/OW**

(Office of Water) dialogue on the issue of un-achievable permit limits.

In response to the data above, some regions suggested that some pollutants such as copper and chlorine that have low limits are likely to drive the exceedance numbers. An examination of the loadings list shows that chlorine is the second largest contributor, copper (as CU) is the 11th largest contributor, and copper (total recoverable) is the 16th largest contributor. (The largest single contributor is total suspended solids, a conventional pollutant.)

Enforcement in Priority Watersheds

Data show that we (EPA and states) are no more likely to take action at SNC facilities in 303(d) listed waters than at facilities in non-303(d) listed waters. We are *slightly* (but not significantly) more likely to take action at repeat SNC and perpetual SNC facilities in 303(d) listed waters - three and six percentage points higher than the national average for each, respectively. [NOTE: Repeat SNCs are facilities in SNC two out of eight quarters and perpetual SNCs are facilities in SNC eight out of eight quarters.] Thirty percent of repeat SNCs in 303(d) listed waters had an enforcement action in the last two years, compared to 27% in non-303(d) listed waters. Thirty eight percent of perpetual SNCs in 303(d) listed waters had an enforcement action in the last two years, compared to 32% in non-303(d) listed waters.

There is no EPA policy or guidance which suggests that NPDES major facilities in 303(d) listed waters should be targeted. When the workgroup asked regions about targeting efforts, they overwhelmingly said that majors are not thought to be significant contributors to impairment and so majors in impaired waters, such as 303(d) listed waters, are not preferentially targeted. There are no data available on the extent to which majors contribute to impairment. **The workgroup recommends further research on how discharges from major facilities may contribute to water impairment or significant pollutant loadings in non-impaired/non-assessed waters, which could help determine the impact of majors on environmental conditions, as well as aid in future targeting efforts.** (See discussion of previous efforts under Data Gaps, below.)

Data Gaps:

The following information would be helpful in determining the extent to which we are protecting human health and the environment:

• Better pollutant reduction data from enforcement actions against NPDES majors.

• Pollutant loadings from permit exceedances. To date, there is no reliable methodology for pulling these data from EPA databases. Data pulled in September 2002 show that pollutant loadings from permit exceedances decreased 94% between 1999 - 2001, from 128.9 billion pounds in 1999, to 42.7 billion pounds in 2000, to 7.6 billion pounds in 2001. This drastic decrease raises questions about the reliability of the data.

• Correlation between major permittees which have received a state or EPA inspection or enforcement action and reductions in permit exceedances.

• Trends in compliance monitoring and enforcement activity levels by EPA regions and states in each of the following sensitive areas:

fish/shellfish bed and beach closure
endangered species habitat
sources of drinking water

outstanding natural resources
wetlands
epidemiological data showing cancer clusters, high levels of gastroenteritis occurrences

With contractor assistance, the NPDES Performance Analysis Workgroup explored correlating impairments in a watershed in Massachusetts and Rhode Island back to the facilities discharging into it. While it did produce a list of facilities in SNC for the same pollutant for which the water was impaired, more refinement would be needed to make the analysis useful. For example, it would be helpful to determine if the impairment is actually downstream of the discharge. Additionally, it would be helpful to determine the relationship between current loadings, permitted discharges, and exceedances.

There are no data available on environmental or human health indicators for NPDES majors from compliance incentives, compliance assistance, or compliance monitoring. All of these data are reported for Clean Water Act as a whole, but not required or reported for majors only. The workgroup believes that data on these compliance activities for NPDES majors would improve our ability to analyse the performance of the program, but recognizes the associated reporting burden to states. **The workgroup recommends that senior managers evaluate the need for data on these compliance activities for NPDES majors given the resource implications for states.**

◆ 2. Achieving Appropriate Levels of Compliance in Key Populations

The analysis for #2 primarily draws from the compliance data found in Appendix A. These data are summarized in tables 3, 4 and 5 below. This analysis also utilizes enforcement and compliance assurance activity data from Appendix B and environmental indicators data from Appendix C. Regional and state breakdowns of the data in the summary table below can be found in the appendices.

Summary of Data

Table 3 - Summary of National Compliance Levels and Trends
Shaded boxes are rates that may be considered high or increasing noncompliance.

Compliance	Comments on FY 1999 - 2001 Compliance Levels	Trends FY 1999-2001
Percent of majors in SNC (in any quarter during the FY)	16% - 24% 1994 - 2001	8 percentage point increase FY '94 - '01
Percent of SNCs that are repeat SNCs (for 2 quarters out of 8)	83% in 2002	Trend data not available
Percent of SNCs that are perpetual SNCs (for 8 quarters out of 8)	6% in 2002	Trend data not available
Percent of prior year SNCs still in SNC	50% - 57%	7 percentage point increase
Percent of SNCs Returned to Compliance in Less Than 2 Years	71 % - 84 %	13 percentage point increase
SNC Recidivism Rate	56 % - 50 %	6 percentage point decrease
Percent in SNC or RNC	50 % - 51 %	2 percentage point increase '99 - '00 and 1 percentage point decrease '00 - '01
Percent of majors with any violation anytime during the FY	79 % - 83 %	4 percentage point increase
Percent of SNCs that are effluent related	50% of SNCs are effluent related (FY2001 data)	Trend data not available
Percent of **federal facility** majors in: 1) SNC, 2) SNC or RNC or 3) with any violation	15, 11, and 2 percentage points above national avg.	SNC rates: 4 percentage point increase 1999-2001. 26 percentage point increase 1993-2000.[2]
Percent of **municipal** majors in: 1) SNC, 2) SNC or RNC or 3) with any violation	3, 3, and 2 percentage points above national avg.	Trend data not available
Percent of **industrial** majors in: 1) SNC, 2) SNC or RNC or 3) with any violation	3, 7 and 5 percentage points below the national avg.	Trend data not available
Percent of all perpetual SNCs and 2 quarter repeat SNCs that are **federal facilities**	3% and 2% in 2002 (federal facilities make up 1.5% of majors)	Trend data not available

[2] The State of Federal Facilities: An Overview of Environmental Compliance at Federal Facilities FY 1999-2000.

Compliance	Comments on FY 1999 - 2001 Compliance Levels	Trends FY 1999-2001
Percent of all perpetual SNCs and 2 quarter repeat SNCs that are that are **municipal** facilities	77% and 67% in 2002 (municipals make up 62% of majors)	Trend data not available
Percent of all perpetual SNCs and 2 quarter repeat SNCs that are that are **industrial** facilities	19% and 30% in 2002 (industrials make up 36% of majors)	Trend data not available
Percent of majors with average exceedances above 100 %, 500 % and 1,000 % for toxic pollutants	50 %, 21 %, and 13 %	Trend data not available
Percent of majors with average exceedances above 100 %, 500 % and 1,000 % for conventional pollutants	33 %, 9 %, and 5 %	Trend data not available

Analysis and Conclusions

"Levels of compliance" are currently measured by compliance rates, permit exceedances, and pollutant loadings from, or amount and percent of, permit exceedances. It is assumed here that compliance rates are surrogates for environmental and human health protection.

National Noncompliance

Data show that significant non-compliance (SNC) has *effectively* remained steady since FY 1994. Data show an increase in the SNC rate of eight percentage points between FYs 1994 and 1997 (from 16% to 24%), but this is explained by changes in the SNC definition which added non-monthly averages, including total residual chlorine, to the SNC universe. The definition change was announced in 1996 and took effect in 1997. Prior to 1996, the data show 0% of SNCs due to non-monthly averages. In 1996 20.3% of SNCs were due to non-monthly averages and in 1997 and 1998 it rose to 53.4% and 52.0% respectively. Data show that rates have remained steady between FYs 1997 and 2001 (24% - 26%).

Recidivism rates are improving but data show that facilities that have received an EPA or state formal action have higher recidivism rates than facilities that have not. Some workgroup members note that this might be because we tend to focus on "problem facilities" that are more likely to violate, or it might be that formal actions are not creating a sufficient deterrent effect.

Data for FY 2001 show that approximately 25% of major facilities were in SNC, 16% - 29% remained in that status for 2 years (and many for even longer) and of those that were returned to compliance there is a 50/50 probability that they will return to SNC again within two years. In FY 2002, 83% of SNCs were repeat SNCs, and 6% were perpetual SNCs. The toxic and conventional pollutant effluent violations by these facilities tend to be substantially above permitted limits, with 13% exceeding permitted levels for toxic pollutants by over 1,000%.

An "appropriate" level of compliance, or goals for compliance, have not been established for this program, making it difficult to determine if the existing rates of compliance are appropriate. Regions indicated that they do not believe that the SNC rates are unacceptably high for majors but do not have any information to support this belief. Regions also said they review every SNC and if they do not take action it is for a reason they believe is justified. The exceptions list is the

existing tool for evaluating whether or not appropriate action is being taken at facilities meeting certain criteria. OECA is also launching a "watchlist" effort to establish criteria for facilities to be monitored for appropriate action. **The workgroup recommends incorporating the exceptions list into the watchlist as a way to ensure that the appropriate actions are being consistently evaluated at appropriate high risk facilities.**

Regions also said they do not believe that permit limit exceedance data are an appropriate environmental indicator because some toxic water-quality based permit limits are set very low making high exceedances likely. However, the workgroup believes strongly that permit limit exceedances are important indicators because the limits are established to be protective of human health and the environment. **The workgroup recommends an OECA/Office of Water dialogue on the issue of un-achievable permit limits.** The proposed further study on the contribution of majors to impairment should shed light on the relationship between exceedances (noncompliance) and impairment. If the study shows a positive relationship between exceedances and impairment, this may suggest that exceedance data can be used as an acceptable proxy for direct measurement of impairment.

Federal Facilities

Federal facilities, which make up 1.5% of the universe of majors, have had SNC rates ranging from 5-15 percentage points above the national average since 1997. (Municipal and industrial facilities make up 62% and 36% respectively and both have SNC rates within three percentage points of the national average.) Federal facility SNC rates increased ten percentage points between 1997 and 2001 with declining inspections and fairly steady formal and informal actions.

High and increasing noncompliance at federal facilities may be due in part to the lack of federal authority to penalize federal facility violations under the Clean Water Act. The Clean Water Act does not provide statutory authority for EPA to issue penalties for NPDES violations at federal facilities. (Citizens and states under the citizens suit provision can obtain "coercive" penalties against federal facilities. Data are not readily available on the extent to which states utilize this provision.)

The 1999 - 2000 State of Federal Facilities compliance report indicates that federal facilities infrastructure funding has been steadily declining and suggests that there is little motivation to spend limited resources on facility upgrades when there is no likelihood of a penalty associated with noncompliance. It also may be that deteriorating infrastructure is making it more difficult for federal facilities to comply, regardless of their intentions. **The workgroup recommends an OC/ORE/FFEO dialogue to discuss causes of noncompliance at federal facilities and use of appropriate tools to improve compliance in the absence of penalties.**

Regional and State Compliance Levels

The output scorecards below summarize regional and state patterns of compliance levels and depict regions and states which contribute most to national noncompliance. This information may be useful for management to identify areas with the most potential for program improvement. A breakdown of the data used to compile this summary is found in Appendix A.

The workgroup recommends that management consider this scorecard format as a convenient way to portray key metrics by region and state, and to identify the outliers. If this format is used for future analyses, the workgroup recommends taking Region 9 out of the national averages because their PCS data quality is so poor.

Table 4 - NPDES Majors Outcome Scorecard - by Region
Shaded boxes are regions with ≥ the median number of hits (4.5).
A hit is given for regions meeting the criteria for each measure.
Data are from FY 2001, unless otherwise specified.

Region	# and % of All Majors	# and % of All Majors in SNC	SNC Rate ≥ Natl Avg.	SNC Rate ≥ Natl Avg. for 3 or 4 years FY 1998-2001	SNC Rate Increasing - 4 Year Trend	Highest % of All SNCs (These rep. 64% of SNCs)	% of Perpetual SNCs ≥Natl Avg. 6% FY 2002	Recidivism Rates ≥ 50%	Recidivism Rates ≥ Natl. Avg. for Each Year FY 1999-2001	Higher % of Toxic Effluent Violations than % of SNC Universe	Higher % of Conventional Effluent Violations than % of SNC Universe	Higher % of "Other" Effluent Violations than % of SNC Universe	# Hits out of 10 Possible
1	456 (7%)	156 (9%)	x	x (4 yrs)	x			x	x	x	x	x	8
2	605 (9%)	99 (6%)	x	x (3 yrs)						x	x	x	5
3	739 (11%)	124 (7%)								x		x	2
4	1,393 (21%)	349 (21%)	x	x (3 yrs)		x	x					x	5
5	1,161 (18%)	368 (22%)	x	x (4 yrs)	x	x	x	x	x				7
6	1,024 (15%)	349 (21%)	x	x (4 yrs)	x	x		x					5
7	390 (6%)	120 (7%)	x	x (4 yrs)	x						x		4
8	269 (4%)	50 (3%)						x					1
9	326 (5%)	30 (2%)					x				x		2
10	289 (4%)	25 (1%)								x	x		2
Total	6,652	1,670	6	6	4	3	3	4	2	4	5	4	---

Data from Regions 3, 7 and 10 are poor. Data from Region 9 are very poor and unreliable.

Table 5 - NPDES Majors Outcome Scorecard - by State
This table includes only the 24 states with more than the median number of hits (1).
A hit is given for states meeting the criteria for each measure.
Data are from FY 2001, unless otherwise specified.
Shaded states have poor data (below 95% DMR entry rate).
"U" in first column indicates states **un**authorized in FY 2001.

State	# and % of All Majors	# and % of All Majors in SNC	SNC Rate ≥ Natl Avg.	SNC Rates Above Natl. Avg. for 3 or 4 Years 1998 - 2001	States with Perpetual SNCs 2002	Recidivism Rates Above 50%	Recidivism Rates ≥ Natl. Avg. for Each Year 1999-2001	100% Recidivism Rates in 1999, 2000, or 2001	# Hits out of 6 Possible
CT	113(1.7%)	33 (1.9%)	x	x (4 yrs)		x			3
MA (U)	138 (2%)	53 (3.1%)	x		x	x			3
ME	87 (1.3%)	23 (1.3%)	x			x			2
NH (U)	60 (1%)	20 (1.1%)	x		x	x			3
RI	25 (.4%)	11 (.7%)	x	x (4 yrs)		x	x		4
VT	33 (.5%)	16 (1%)	x	x (4 yrs)			x	x	4
NY	355 (5.3%)	82 (4.9%)			x	x	x		3
DC (U)	4 (<1%)	3 (.2%)	x					x	2
AL	194 (2.9%)	73 (4.3%)	x		x	x	x		4
MS	98 (1.5%)	31 (1.8%)	x		x	x			3
NC	231 (3.5%)	68 (4.1%)	x		x	x			3
TN	156 (2.3%)	65 (3.9%)	x	x (4 yrs)	x	x	x		5
IN	185 (2.8%)	68 (4%)	x	x (4 yrs)	x	x			4
MI	184 (2.8%)	66 (3.9%)	x	x (4 yrs)	x				3
OH	294 (4.4%)	108(6.4%)	x	x (4 yrs)	x	x	x		5
WI	134 (2%)	84 (5%)	x					x	2
LA	246 (3.7%)	57 (3.4%)		x (3 yrs)	x	x	x		4
OK	93 (1.4%)	24 (1.4%)		x (4 yrs)		x	x		3
TX	542 (8.1%)	238 (14.3%)		x (3 yrs)	x	x			3
KS	58 (.9%)	21 (1.3%)	x	x (4 yrs)					2
NE	55 (.8%)	23 (1.3%)	x	x (4 yrs)	x	x			4
UT	33 (.5%)	10 (.6%)	x	x (4 yrs)		x	x	x	5
AZ (U)	45 (.6%)	10 (.6%)				x		x	2
AK (U)	74 (1.1%)	9 (.5%)				x	x		2
Total			18	13	13	19	10	5	—

◆ 3. Achieving the Appropriate Levels of Enforcement and Compliance Assurance Activity in the Regulated Community

The analysis for #3 primarily draws from the enforcement and compliance assurance activity data from Appendix B. These data are summarized in tables 6, 7 and 8 below. This analysis also utilizes compliance data from Appendix A, and environmental indicators data from Appendix C. Regional and state breakdowns of the data in the summary table below can be found in the appendices.

Summary of Data

EPA and State Enforcement Activity Levels and Trends

Table 6 - Summary of National Enforcement Activity Levels and Trends
Data used to support these findings are from Appendix B, tables B1 - B4.
Shaded boxes are those with low activity or downward trends.

Enforcement Activity	Comments on FY 1999 - 2001 Activity Levels	Trends FY 1999 - 2001 (unless otherwise specified)
Number of Inspections	--	8 % decrease
Inspection Coverage (Percent of facilities inspected)	Coverage is high with 91% of facilities inspected in last 2 years and 97% inspected in the last 5 years.	6 percentage point decrease
Number of Informal Actions	--	50 % decrease
Total EPA and State Formal Actions	--	11% decrease
State Formal Actions	--	9 % increase
EPA Formal Actions	--	45 % decrease
Percent of SNC Facilities with One or More Formal Actions (by State and EPA) within 2 years	24 %	Trend data not available
Percent of SNC Facilities Addressed by Formal Action within 90 Days - (Timely and Appropriate Action)	13% - 9%	4 percentage point decrease
Percent of Repeat SNC Facilities with One or More Formal Actions (by State and EPA) within 2 years	27% and 33% for 2 and 4 quarter repeat SNCs, respectively	Trend data not available
Percent of Perpetual SNC Facilities with One or More Formal Actions (by State and EPA) within 2 years	33% in 2001	Trend data not available
Percent of Enforcement Actions Resulting in Improvements in Environmental Management (Non-physical Complying Actions)	82%-60% Data is questionable (but improving) so real figures may actually be higher.	22 percentage point decrease
Initiations: ACOs	--	31 % decrease
Initiations: APO Complaints	--	28 % decrease
Initiations: DOJ Referrals	--	36 % increase
Settlements: ACOs	--	31 % decrease

Enforcement Activity	Comments on FY 1999 - 2001 Activity Levels	Trends FY 1999 - 2001 (unless otherwise specified)
Settlements: APO Settlements	--	42% increase '99-'00 and 42% decrease '00 -'01
Settlements: Judicial Settlements	--	12% increase
* Judicial Penalties - **Average** Penalty Size per Formal Action for Majors FY 1999 - 2001	EPA $ 4,996 State $5,637	
* Administrative Penalties - **Average** Penalty Size per Formal Action for Majors FY 1999 -2001	EPA $ 6,205 State $ 6,455	
**Percent of EPA & State Formal Actions with Monetary Penalty (All Majors) (OTIS)	40%, 44%, 39%	1% decrease
**Total Value of SEPs	--	72% decrease
**Total Value of Injunctive Relief	--	63% decrease
Inspections at Federal Facilities as a Percentage of All Inspections	3% and 2% for '99 & '00 (Note: Federal Facilities make up 2% of majors)	33% decrease between 1995 and 2000
Formal Actions at Federal Facilities as a Percentage of All Formal Actions	1% and 2% for '99 and 2000	1 percentage point increase
Penalties at Federal Facilities	$ 0	Has always been $0 - there is no penalty authority for Federal Facilities under the CWA
Percent of SNCs, Perpetual SNCs and 4 Qaurter Repeat SNCs Addressed by Formal Action at Federal Facilities	0.1%, 1%, 0.3%	Trend data not available.

* Average penalties are calculated for *all* facilities but federal facilities do not yield penalties.
**States are not required to report these data, therefore these data are not reliable.

The percent of enforcement actions (nationally and in four out of ten regions) that result in non-physical complying actions decreased steadily over FYs 1999, 2000 and 2001, from 82% to 68% to 60% respectively.

Analysis and Conclusions

Having high levels of enforcement activity is one key means for assuring compliance, but it is not the only way. Even low or declining enforcement activity levels may be "appropriate" if compliance rates are being maintained at (or increased) an appropriate level. This might be accomplished by improving effectiveness through increased focus on areas of greatest risk, increased penalties, and/or more and better compliance assistance. Therefore, to address this, we must look at the output levels in the context of the deterrent effect we are creating and the impact on compliance and environmental and/or human health.

Data show that significant non-compliance (SNC) has *effectively* remained steady since 1994. (Data show an increase in the SNC rate of eight percentage points between FY 1994 and 1997 (from 16% to 24%), but this is explained by changes in the SNC definition which added non-monthly averages, including total residual chlorine, to the SNC universe.) Data show that rates have remained steady between FY 1997 and 2001 (24% - 26%).

Inspections:

The likelihood of a major facility being the subject of an inspection is high (97% coverage in the last five years) but decreased eight percentage points between FY 1999 and 2001.

Penalties:

Average penalties and percent of actions resulting in penalties for majors are low, which suggests that escalation may not be occurring. States are not required to report penalty data to EPA so the data may not be reliable. However, data show that average EPA penalties are $4,996 and $6,205 for judicial and administrative actions respectively. State data are unreliable, but show penalties in the same range for both judicial and administrative actions ($5,637 and $6,455 respectively.) Between 39% - 44% of EPA and state formal actions result in penalties.

Formal and Informal Actions:

Data show that 24% of SNCs, 27% of repeat SNCs, and 32% of perpetual SNCs received a formal action in the last two years. (Live data September 2002.) Data show an overall 11% decrease in total EPA and state formal actions, with a 9% increase for states and 45% decrease for EPA.

Total EPA and State informal actions decreased 50%.

Between 9% - 13% of EPA and State combined SNCs were addressed timely and appropriately.

Federal Facilities:

A look at output levels for federal facilities shows declining inspections and fluctuating but fairly steady overall informal and formal enforcement activity levels since FY 1995, and no penalties. (See #2 for a discussion on the lack of EPA penalty authority for federal facilities under the CWA.) Federal facilities have higher noncompliance rates than the national average for all facility types. This might suggest that penalties do create a deterrent effect and have a positive impact on compliance rates.

The 1999 - 2000 State of Federal Facilities compliance report indicates that federal facilities infrastructure funding has been steadily declining and suggests that there is little motivation to spend limited resources on facility upgrades when there is no likelihood of penalty associated with noncompliance. It also may be that deteriorating infrastructure is making it more difficult for federal facilities to comply, regardless of their intentions. **The workgroup recommends an OC/ORE/FFEO dialogue to discuss causes of noncompliance at federal facilities and use of appropriate tools to improve compliance in the absence of penalties.**

Enforcement Management System (EMS)

The NPDES EMS is national enforcement response policy, or guidance, for encouraging timely and "appropriate" enforcement. We do not have any data that directly show whether or not, or to what extent, the EMS is being followed. However, levels of timely and appropriate response, as well as small, infrequent penalties show that "escalation" and recovery of economic benefit may not be occurring as often as it should and this might have a negative impact on deterrence. The EMS is probably not being well utilized in its current condition. **The workgroup recommends that the EMS be revisited, particularly regarding policies on when to issue penalties, clarification of escalation, and timely and appropriate policies, as well as its format and user-friendliness.**

Deterrence

Low enforcement activity levels may compromise the deterrent effect of our actions. The workgroup is putting forth a number of recommendations which are intended to strengthen deterrence, **including updating the EMS (Enforcement Management System) and the SNC definition for NPDES. Other recommendations include having senior management focus attention on quality of enforcement actions (escalation) and penalty amounts and further study of the effects of enforcement on deterrence.**

Addressing Majors in Special Populations/Areas

Data show that EPA and states are no more likely to take action at NPDES major SNC facilities in 303(d) listed waters than at facilities in non-303(d) listed waters. We are *slightly* (but not significantly) more likely to take action at repeat SNC and perpetual SNC facilities in 303(d) listed waters - three and six percentage points higher than the national average for each, respectively. [NOTE: Repeat SNCs are facilities in SNC two out of eight quarters and perpetual SNCs are facilities in SNC eight out of eight quarters.] Thirty percent of repeat SNCs in 303(d) listed waters had an enforcement action in the last two years, compared to 27% in non-303(d) listed waters. Thirty eight percent of perpetual SNCs in 303(d) listed waters had an enforcement action in the last two years, compared to 32% in non-303(d) listed waters.

There is no EPA policy or guidance which suggests that NPDES major facilities in 303(d) listed waters should be targeted. When the workgroup asked regions about targeting efforts, they overwhelmingly said that majors are not thought to be contributors to impairment and so majors in impaired waters, such as 303(d) listed waters, are not preferentially targeted. There are no data available on the extent to which majors contribute to impairment. **The workgroup recommends further research on how discharges from major facilities may contribute to water impairment or significant pollutant loadings in non-impaired/non-assessed waters, which could help determine the impact of majors on environmental conditions, as well as aid in future targeting efforts.** (See discussion of previous efforts under #2, Data Gaps.)

Data show that we take more actions in areas with high percentages (>25%) of minorities. Fifty nine percent of repeat SNC facilities in EJ sensitive areas receive no formal action compared to 70% in non-EJ areas.

Data Gaps:

States are not currently required to report penalty data to PCS, which limits our ability to draw conclusions about the effect of penalties on compliance and deterrence. There is a commitment through the PCS modernization effort for states to submit penalty data, but the effective date of this system has been postponed. **The workgroup recommends accelerating the schedule for states to submit penalty data to EPA.**

Data are not available for NPDES majors on compliance incentives, compliance assistance, capacity building, responses to citizen complaints, or outcomes from compliance monitoring. All of these data are reported by EPA for the Clean Water Act as a whole, but are not required or reported for majors only. The workgroup believes that data on these compliance activities for NPDES majors would improve our ability to analyse the performance of the program, but recognizes the associated reporting burden to states. **The workgroup recommends that senior managers evaluate the need for data on these compliance activities for NPDES majors given the resource implications for states.**

Regarding compliance assistance, the overall number and "reach" of OECA's compliance

assistance activities to both the regulated community and to other assistance providers has steadily increased, and we might assume that there has been a proportional increase to NPDES majors.

Regional and State Enforcement Activity Levels

The output scorecards below summarize regional and state patterns of enforcement activity. This information may be useful for management to identify areas with the most potential for program improvement. A breakdown of the data used to compile this summary is found in Appendix B.

The workgroup recommends that management consider this scorecard format as a convenient way to portray key metrics by region and state, and to identify the outliers. If this format is used for future analyses, the workgroup recommends taking Region 9 out of the national averages because their data quality is so poor.

Table 7 - NPDES Majors Output Scorecard - by Region
Shaded boxes are Regions with ≥ the median number of hits (2.5). A hit is given for regions meeting the criteria for each measure.
Data are from 1999-2001 unless otherwise specified.

Region	# and % of All Majors	# and % of All Majors in SNC	Low Percent of All Formal Actions Relative to SNC Universe	Low Percent of All Formal & Informal Actions (Relative to % of all Majors)	Below National Avg for % of SNCs Addressed with Formal Actions AND Timely & Appropriately	≤ 50% of Perpetual SNCs w/Formal Action in Last 2 Years	# Hits out of 4 Possible
1	456 (7%)	156 (9%)	x	x		x	3
2	605 (9%)	99 (6%)			x	x	2
3	739 (11%)	124 (7%)				x	1
4	1,393 (21%)	349 (21%)	x		x	x	3
5	1,161 (18%)	368 (22%)	x	x	x	x	4
6	1,024 (15%)	349 (21%)					0
7	390 (6%)	120 (7%)	x	x	x	x	4
8	269 (4%)	50 (3%)	x	x	x	x	4
9	326 (5%)	30 (2%)				x	1
10	289 (4%)	25 (1%)				x	1
Total	6,652	1,670	5	4	5	9	–

Data from Regions 3, 7 and 10 are poor. Data from Region 9 are very poor and unreliable.

Table 8 - NPDES Majors Output Scorecard - by State
This table only includes the 23 states with ≥the median number of hits (2).
A hit is given for states meeting the criteria for each measure.
Data are from 1999-2001 unless otherwise specified.
Shaded states have poor data (below 95% DMR entry rate).
"U" in first column indicates states **un**authorized in 2001.

State	# and % of All Majors	# and % of All Majors in SNC	Low Percent of All Formal Actions Relative to SNC Universe	Low Percent of All Formal & Informal Actions FY 1999-2001 (Relative to % of all Majors)	Below National Avg for % of SNCs Addressed with Formal Actions	Below National Avg for % of SNCs with Formal Actions Addressed Timely and Appropriately	Less than 100% of Perpetual SNCs with Formal Action FY 2002	# Hits out of 5 Possible
CT	113 (1.7%)	33 (1.9%)	x	x	x			3
MA (U)	138 (2%)	53 (3.1%)	x	x	x	x	x	5
NH (U)	60 (1%)	20 (1.1%)	x	x			x	3
RI	25 (.4%)	11 (.7%)	x	x				2
NY	355 (5.3%)	82 (4.9%)	x	x			x	3
DC (U)	4 (<1%)	3 (.2%)	x	x	x			3
PA	382 (5.7%)	48 (2.8%)	x	x			x	3
AL	194 (2.9%)	73 (4.3%)	x	x	x		x	4
KY	130 (1.9%)	25 (1.5%)	x				x	2
TN	156 (2.3%)	65 (3.9%)	x	x	x		x	4
IN	185 (2.8%)	68 (4%)	x	x	x		x	4
MI	184 (2.8%)	66 (3.9%)	x	x	x		x	4
MN	86 (1.3%)	13 (1.7%)	x	x				2
OH	294 (4.4%)	108 (6.4%)	x	x	x	x	x	5
WI	134 (2%)	84 (5%)	x	x	x		x	4
KS	58 (.9%)	21 (1.3%)	x	x	x			3
MO	148 (2.2%)	43 (2.5%)	x	x	x			4
NE	55 (.8%)	23 (1.3%)	x	x			x	3
CO	112 (1.7%)	13 (.7%)	x	x	x		x	4
MT	43 (.6%)	9 (.5%)	x	x	x			3
SD	29 (.43%)	4 (.2%)	x	x	x			3
UT	33 (.5%)	10 (.6%)	x	x	x			3
AZ (U)	45 (.6%)	10 (.6%)	x	x		x		3
Total	--	--	23	22	15	3	13	--

◆ 4. Changing the Behavior of the Regulated Community in Ways That Lead to Improved Environmental Performance

The analysis for #4 draws from the compliance data found in Appendix A, the activity data from Appendix B and environmental indicators data from Appendix C. These data are summarized above in text and in tables 1-8.

Analysis and Conclusions

Data that show a direct cause and effect relationship between our activities and a change in the behavior of the regulated community are the most ideal for determining the extent to which our activities change the behavior of the regulated community. Such data for the NPDES majors enforcement program are limited to data on the percent of enforcement actions that result in reduction, elimination or treatment of pollutants (pollutant reduction data) and percent of enforcement actions requiring improvements in environmental management (non-physical complying actions). These data presently are very incomplete and therefore unreliable for purposes of meaningful analysis. Data on the outcomes from compliance assistance, compliance monitoring and compliance incentives would also be useful in addressing this question, but these data are reported only for CWA and no distinction is made for majors. The workgroup believes that data on these compliance activities for NPDES majors would improve our ability to analyse the performance of the program, but recognizes the associated reporting burden to states. **The workgroup recommends that senior managers evaluate the need for data on these compliance activities for NPDES majors given the resource implications for states.**

Another way to address the question is to compare trends in activity levels to trends in environmental performance, or in this case, compliance rates. This is a comparison of *outputs* to *outcomes*. While many variables might affect the compliance rates, we operate under the assumption that our enforcement and compliance activities at least influence performance and behavior changes, including compliance rates.

The regulations which define compliance and establish permit limits are intended to be protective of human health and the environment, therefore we believe that enforcing them ensures the appropriate level of protection is achieved. We operate under the assumption that our enforcement and compliance assurance activities have a positive impact on human health and the environment, and that more enforcement activity and increased compliance results in more environmental and human health protection.

Protecting Human Health and the Environment

There is a lack of quantitative data available to directly determine how enforcement efforts contribute to the goal of protecting human health and the environment. Pollutant reduction data from enforcement and assistance is not yet adequate for analysis, but it is improving.

Data on enforcement actions in 303(d) listed waters are also available. We are unable to determine at this time whether or not our enforcement actions are directly addressing pollutants of concern in 303(d) listed waters. **The workgroup recommends further research on how discharges from major facilities may contribute to water impairment or significant pollutant loadings in non-impaired/non-assessed waters, which could help determine the impact of majors on environmental conditions, as well as aid in future targeting efforts.** Ultimately this information can be used to estimate the environmental impacts of enforcement activity.

Toxic water quality-based permit limits are often exceeded by high percentages. Some EPA staff believe that some of the most extreme exceedances may be the result of un-achievable limits due to technology availability and/or cost. Regions believe that majors are not significant contributors to impairment but there are no data available to support this. Further study of pollutant loadings from majors to impaired waters can be linked to permit limit exceedances which will ultimately inform estimations of the environmental impacts from enforcement activity.

Enforcement Activity

Data show that enforcement activity (EPA and state informal, and EPA formal actions) has been declining. Data for EPA and the states for FY 1999-2001 show that a low percentage (9% - 13%) of enforcement actions are taken timely and appropriately, only 39% - 40% of formal actions result in penalties, penalties are low (about $5,000 per action), and escalation may not be occurring. EPA can not impose penalties on federal facilities where the SNC rates are highest. Likelihood of inspections is high but decreased eight percentage points in three years. (See #3 for more detail on enforcement activity levels.)

Deterrence

Our enforcement activity levels may be impacting the deterrent effect of our actions. The workgroup is putting forth a number of recommendations which are intended to improve deterrence, **including updating the EMS (Enforcement Management System) for NPDES and the SNC definition for majors.** The EMS is probably not being well utilized in its current condition. **The EMS should be revisited, particularly regarding policies on when to issue penalties, clarification of escalation, and timely and appropriate policies, as well as format and user friendliness. Other recommendations include having senior management focus attention on quality of enforcement actions (escalation) and penalty amounts and further study of the effects of enforcement on deterrence.**

Our Impact on Levels of Compliance

Data show that significant non-compliance (SNC) has *effectively* remained steady since 1994. Data show an increase in the SNC rate of eight percentage points between FY 1994 and 1997 (from 16% to 24%), but this is explained by changes in the SNC definition which added non-monthly averages, including total residual chlorine, to the SNC universe. The definition change was announced in 1996 and took effect in 1997. Prior to 1996, the data show 0% of SNCs due to non-monthly averages. In 1996 20.3% of SNCs were due to non-monthly averages and in 1997 and 1998 it rose to 53.4% and 52.0% respectively. Data show that rates have remained steady between FY 1997 and 2001 (24% - 26%).

The fact that enforcement activity levels have decreased while SNC rates have remained steady and recidivism rates are improving *might* suggest that we are operating more efficiently or effectively by maintaining compliance levels with diminishing resources and activity levels. It may also mean that enforcement actions are not the most significant drivers for compliance. Data are not adequate to discern which of these is the case.

A closer look at regional data shows that three of the five regions with the worst "overall" compliance records also had the lowest relative activity levels, while two of the five regions with the lowest activity levels also had the worst compliance records. State data show that 14 out of 24 (58%) states with the worst overall compliance records also had the lowest activity levels and 14 out of 23 (61%) states with the lowest activity levels also had the worst overall compliance records (see Output and Outcome Scorecards, tables 4, 5, 7 and 8). These data suggest a positive relationship between EPA/state enforcement activity and compliance. Conversely, data show that facilities which have been subject to a formal action from either EPA or a state have

higher rates of recidivism than those that have not had any formal action. This may be because we tend to focus on "problem facilities" or those more likely to violate, or it might be that formal actions are not creating a sufficient deterrent effect. Regions suggested that recidivism rates are driven by violation of interim limits, but data from 2002 show that only 2% of SNC violations are for violation of interim limits.

Data show that 49% of facilities recover from SNC status without formal enforcement action. Regions believe that compliance assistance and the deterrent effect from informal actions may be helping facilities recover from SNC, but there are no data to support this. **The workgroup recommends further study on the deterrent impact of CWA enforcement including the impact of enforcement on recidivism.** Additionally, further understanding of recidivism may be gained through careful examination of past exceptions lists.

Federal facilities make up 1.5 % of the majors universe and have had SNC rates ranging from 5 - 15 percentage points above the national average since 1997. High and increasing SNC rates at federal facilities may be due in part to the lack of penalty authority to address federal facility violations under the Clean Water Act. Other factors may include deteriorating infrastructure and infrastructure funding. If lack of penalties is a significant factor, this might suggest that penalties do create a deterrent effect and have a positive impact on compliance rates.**The workgroup recommends an OC/ORE/FFEO dialogue to discuss causes of noncompliance at federal facilities and use of appropriate tools to improve compliance in the absence of penalties.**

Recommendations

1. Revisit EMS and SNC. Include a policy on when to issue penalties, clarification of escalation policy and timely and appropriate policy, and how and when to establish interim limits. Track who is following it before and after revision.

2. Further study the contribution of majors to impairment in 303(d) listed waters, or significant pollutant loadings in non-impaired/non-assessed waters, and link to permit limit exceedances.

3. Have senior management focus attention on quality of enforcement actions (escalation), penalty amounts, and data quality issues (especially Region 9) during Regional visits.

4. Accelerate the deadline for state reporting of penalty data to EPA.

5. Harmonize overlapping efforts such as this analysis, Federal Facilities Enforcement Office efforts, and Office of Water study on NPDES Program Health.

6. Incorporate the exceptions list concept into the watchlist concept.

7. Target SNCs with the worst compliance records and without effective enforcement (use watchlist criteria once established).

8. Utilize scorecard concept to identify regions/states of concern (do not include Region 9 data).

9. Initiate a dialogue with Office of Wastewater Management regarding un-achievable permit limits.

10. Consult with the FFEO to explore root causes of noncompliance and ways to reduce noncompliance at federal facilities, e.g. through dialogue with federal facilities or an increase in enforcement or compliance assurance activities.

11. Evaluate the need for data to be reported for NPDES majors for compliance incentives,

compliance assistance, capacity building, responses to citizen complaints, and results from compliance monitoring given the resource implications for states.

12. Further study the deterrent impact of CWA enforcement including the impact of enforcement on recidivism.

13. Initiate subsequent (consecutive) performance analyses for other parts of the water program such as minors and wet weather.

Next Steps

OECA and Regional management should decide which recommendations to implement based on their potential for improving the program as well as the associated resource considerations.

The workgroup recommends that subsequent (consecutive) analyses be done for other parts of the water program.

February 2003 **Appendix A**

Compliance Data
NPDES Majors Performance Analysis

NATIONAL DATA

Regions 9 and 10 have very poor data quality and the data are unreliable.

A.1 Compliance - 3 year Trend 1999 - 2001 (Except for SNC which shows 8 year trend.)

	1994	1995	1996	1997	1998	1999	2000	2001
Percent of majors in SNC in any quarter during the FY	16%	15%	17%	25%	26%	25%	26%	24%
Percent of prior year SNCs still in SNC						50%	53%	57%
Percent of SNCs returned to compliance in less than 2 Years						71%	71%	84%
SNC recidivism rate						56%	54%	50%
Percent in SNC or RNC						50%	52%	51%
Percent of majors with any violation anytime during the FY						79%	81%	83%
Percent of SNCs that are effluent related						--	--	50%
Percent of federal facilities in SNC						35%	32 %	39%

The average number of effluent violations per major facility in 2001 was 11.2. The average number of SNC effluent violations per major facility in 2001 was 6.4.

Perpetual and Repeat SNCs – FY 2001

Perpetual SNCs are those majors which have been in SNC 8 out of 8 quarters in the last 2 years. Four quarter Repeat SNCs are those which have been in SNC 4 out of 8 quarters in the last 2 years. Two quarter Repeat SNCs are those which have been in SNC 2 out of 8 quarters in the last 2 years.

The following list is based on data pulled from OTIS in 7/02. Regions have since been asked to verify the number of perpetual SNCs but at the time of this writing no determination has been made as to what, if any, adjustments will be made to the numbers.

A.2 Perpetual and Repeat SNCs (OTIS 9/30/02)

	Number of Facilities	Percent of the Total Universe of Majors	Percent of All NPDES Majors in SNC
Perpetual SNC	93	1%	6%
4Quarter Repeat SNCs	560	8%	35%
2 Quarter Repeat SNCs	1,334	20%	83%

Perpetual SNCs are also captured in counts for two and four quarter repeat SNCs, and two

quarter repeat SNCs are also captured in four quarter repeat SNCs.

Note: Examination of exceptions list shows many are SNC for much longer than 2 years.

A.3 Compliance Rates by Facility Type 1997 - 2001
Shaded boxes are those higher than the national average.

	# and % of all majors	1997	1998	1999	2000	2001
National	6,652	25%	26%	25%	26%	24%
Industrial	2,420 (36%)					21%
Municipal	4,118 (62%)					27%
Federal	102 (1.5%)	30%	39%	35%	33%	39%

A.4 Compliance Rates by Facility Type - 2001
Shaded boxes are those higher than the national average.

	National Avg.	Industrial	Municipal	Federal
Percent SNC	24%	21%	27%	39%
Percent SNC or RNC	51%	44%	54%	62%
Percent with any violation	83%	78%	85%	85%
Percent SNC noncompliance with BOD permit limits (Statistically Valid)	--	--	16% (up from 12% in 2000)	--
Percent in SNC noncompliance with TSS permit limits (Statistically Valid)	--	--	16% (up from 13% in 2000)	--

Industrial and municipal major facilities have 2001 SNC rates 3% below and 3% above, respectively, the national average for all NPDES majors. However, data show that 69% of *repeat* SNCs are municipal sewer systems.

A.5 Perpetual and Repeat SNCs by Facility Type (OTIS 9/30/02)

Facility Type	Percent of all Majors	# SNCs and % of total	# Perpetual SNCs and % of total	# 4 Quarter Repeat SNCs and % of total	2 Quarter Repeat SNCs and % of total
Federal Facilities	2%	43 (2%)	3 (3%)	13 (2%)	30 (2%)
Municipal Facilities	62%	1,547 (66%)	72 (77 %)	393 (70%)	899 (67%)

Industrial Facilities	36%	744 (32%)	18 (19%)	154 (28%)	404 (30%)
All Facility Types	100%	100%	93 (100%)	560 (100%)	1,334 (100%)

Federal facilities have a national average SNC rate of 39%, or 15% above the national average for all majors.

Exceedances

2001 Effluent Violations and Percent Over Limit

A.6 Percent of Majors with Average Exceedances over 100% , 500%, and 1,000 %

	Percent of majors with average exceedances above **100%**	Percent of majors with average exceedances above **500%**	Percent of majors with average exceedances above **1000%**
Toxic Limits	50%	21%	13% (832 facilities)
Conventional Limits	33%	9%	5% (580 facilities)

A.7 Number of Majors with Exceedances

	<20 %	20 % to 39 %	40 % to 59 %	60 % to 79 %	80 % to 99 %	100 % to 199 %	200% to 499 %	500 % to 999	>1,000 %	Unk.
Toxic Limits	845	798	515	374	485	817	994	454	832	107
Conventional Limits	2,918	2,073	1,263	879	687	1,536	1,234	487	580	57

Recidivism Rates and Formal Actions 2001

The national recidivism rate for all NPDES majors in 2001 was 50%. The recidivism rate for majors who received an EPA formal action was 59%, for those with a state formal action it was 50% and for those with no action it was 49%. Four regions had highest recidivism rates among facilities with an EPA action, and five regions had highest rates where the state took an action. Only one region had a higher recidivism rate among facilities with no action than facilities with an EPA or state action.

REGIONAL AND STATE DATA

Three key metrics of compliance were chosen for examination at the Regional and State Level:

- SNC Rates
- Perpetual and Repeat SNCs
- Recidivism Rates

REGIONAL DATA

Note: Regions 3, 7, 9 and 10 have DMR entry rates below 95% (the national target). Region 9 has a DMR entry rate of 48%. (2001)

Regional SNC Rates

A.8 SNC Rates - 4 year Trend
(Shaded boxes are at or above national average)

Region	1997	1998	1999	2000	2001	Comments
1	--	31%	28%	36%	35%	consistently above average and increasing
2	--	34%	33%	17%	28%	slightly above average and declining
3	--	18%	16%	13%	17%	
4	--	32%	28%	24%	25%	declining
5	--	31%	29%	37%	36%	consistently above average and increasing
6	--	26%	28%	39%	34%	consistently above average and increasing
7	--	28%	25%	27%	31%	consistently above average and increasing
8	--	18%	17%	19%	19%	
9	--	8%	8%	7%	9%	
10	--	15%	11%	11%	9%	
National Avg.	**25%**	**26%**	**25%**	**26%**	**25%**	

The national SNC rate has remained fairly consistent between 1997 and 2001 (Regional breakout of SNC rates is not available for 1997). Regions 1, 5, 6, & 7 have rates consistently above the national average *and* increasing. Regions 9 and 10 have SNC rates far below the national average but their data is unreliable. This may mean that the national average is actually higher than these data indicate.

A.9 Regional SNC Rates By Type of Facility - 2001
Shaded boxes are those at or above national average.

Regions	Industrial	Municipal	Federal
1	26%	38%	50%
2	14%	17%	50%
3	20%	14%	36%
4	21%	27%	50%
5	31%	33%	0%
6	24%	41%	40%
7	28%	31%	67%
8	23%	17%	14%
9	4%	9%	44%
10	5%	13%	0%
National Avg.	**21%**	**27%**	**39%**

The highest and lowest SNC rates and the most variation across regions occurs in rates for federal facilities.

A.10 Regional Percentage of All SNCs 1999 - 2001
Shaded boxes are those with 3 highest percentages of all SNCs.

Region	1999	2000	2001
1	8 %	10 %	9 %
2	9 %	5 %	6 %
3	8 %	6 %	7 %
4 3rd Highest	22 %	18 %	20 %
5 2nd Highest	21 %	26 %	23 %
6 1st Highest	17 %	23 %	21 %
7	8 %	6 %	7 %
8	3 %	3 %	3 %
9 Lowest	2 %	1 %	2 %
10 Lowest	2 %	2 %	1 %
Total	100 %	100 %	100 %

Regional Perpetual and Repeat SNC Rates

A.11 Percent of Region's majors that are in SNC *and* Percent of SNCs that are Perpetual or Repeat SNCs - 2001 Shaded boxes are at or above national average.

Region	Percent of NPDES Majors Facilities in SNC	Percent of SNCs that are Perpetual SNCs	Percent of SNCs that are Perpetual **or** Repeat SNCs
1	34.2 %	4.5 %	93 %
2	16.4 %	1 %	95 %
3	16.8 %	1.6 %	69 %
4	25.1 %	8 %	82 %
5	31.7 %	6.8 %	91 %
6	34.1 %	3.2 %	89 %
7	30.8 %	2.5 %	82 %
8	18.6 %	2 %	86 %
9	9.2 %	10 %	77 %
10	8.7 %	4 %	84 %
National	**25 %**	**5%**	**86 %**

Regional Recidivism Rates

A.12 Regional Recidivism Rates - 3 Year Trend
Shaded boxes are those at or above national average.

Region	1999	2000	2001
1	62%	59%	68%
2	56%	54%	34%
3	47%	43%	44%
4	65%	54%	48%
5	56%	56%	57%
6	55%	57%	57%
7	49%	52%	40%
8	63%	45%	53%
9	27%	31%	29%
10	39%	44%	44%
National Avg	**56%**	**54%**	**50%**

A.13 Number of Majors with Exceedances by Region 2001
Shaded boxes are regions with high percent of exceedances relative to universe of majors in SNC.

Region	# of Majors	Percent of All Majors in SNC	# Total Toxic Limit Exceed-ances	% of all Toxic Limit Exceed-ances	# Total Convention-al Limit Exceed-ances	% of all Convention-al Limit Exceed-ances	# Total "Other" Limit Exceedances	% of all "Other" Exceedances
1	456	9 %	788	13 %	1,249	11 %	1,568	15%
2	605	6 %	1,349	22 %	2,127	18 %	1,717	17%
3	739	7 %	797	13 %	710	6 %	866	8%
4	1,393	21 %	810	13 %	2,465	21 %	2,567	25%
5	1,161	22 %	1,009	16 %	1,868	16 %	1,544	15%
6	1,024	21 %	642	10 %	1,618	14 %	1,027	10%
7	390	7 %	167	3 %	873	7 %	360	3%
8	269	3 %	64	1 %	179	2 %	272	3%
9	326	2 %	531	8 %	421	4 %	274	3%
10	289	1 %	64	1 %	204	2 %	166	2%
Total	6,652	100%	6,221	100 %	11, 714	100 %	10,361	100%

STATE DATA

Note: The following states have DMR entry rates below 95%: DC, AL, OH, WI, NM, TX, MO, NE, WY, AZ, HI, CA, NV, AK, ID. The following states have DMR entry rates below 91%: DC, WI, MO, NE, WY, AZ, HI, CA, NV, ID. (FY 2001)

State SNC Rates (Unauthorized States are asterisked.)

A.14 States with SNC rates in the following ranges for 2001:
2001 National average = 25.1%

SNC Rate	Number of States	States
0 - 25 %	32	NJ, NY, *PR, VI, DE, PA, VA, WV, FL, GA, KY, SC, IL, MN, AK, LA, *NM, OK, TX, IA, CO, MT, ND, SD, *AZ, CA, HI, *NV, *AK, *ID, OR, WA
26 - 50 %	19	CT, *MA, ME, *NH, RI, VT, MD, AL, MS, NC, TN, IN, MI, OH, KS, MO, NE, UT, WY
50 - 75 %	2	*DC, WI

A.15 States with SNC Rates Above National Average Each Year 1998 - 2001
CT, RI, VT, VI, TN, IN, MI, OH, OK, KS, NE, UT
(TX and LA were above for 3 of the 4 years.)

A.16 Distribution of SNC Rates Across States for Industrial, Municipal, and Federal Facilities - 2001
The highest SNC rates occur at federal facilities. Fifteen states have federal facility SNC rates of 50% or higher. Of those, 6 six states have 100% SNC rates. They are CT, FL, SC, AR, TX, IA.

A.17 States with Perpetual SNCs - 2002
NC, IL, TX, LA, KY, MS, WV, IN, TN, AL, FL, NE, MI, OH, MN, CA, *MA, *NH, PA, HI, NY, OR, CO

A.18 State Recidivism Rates 2001
2001 National average = 50%

Recidivism Rates	Number of States	States
0-25 %	6	NJ, *PR, GA, *NM, ND, CA
26-50 %	19	MD, PA, VA, FL, KY, SC, IL, MI, MN, AR, IA, KS, MO, CO, MT, SD, *ID, OR, WA
51-75 %	20	CT, *MA, ME, *NH, RI, NY, AL, MS, NC, TN, IN, OH, LA, OK, TX, NE, UT, WY, *AZ, *AK
76-100 %	4	VT, *DC, WV, WI

No data: *VI, DE, HI, *NV

States with Recidivism Rates Above National Average Each Year 1999 - 2001
RI, VT, NY, AL, TN, OH, LA, OK, UT, *AK

A.19 States with a 100% or 0% Recidivism Rate in FY 1999, 2000, or 2001

	100%	0%
FY99	MT	*DC, DE, ND, SD, HI, *NV
FY00	VT, *PR, VI, UT, *AZ	ND, *NV
FY01	VT, *DC, WI	ND

In each of the three fiscal years examined, the range among the states was from 100% recidivism to 0% recidivism. The list of states with 100% or 0% recidivism changes substantially year by year.

February 2003 **Appendix B**

Enforcement Activity:
NPDES Majors Performance Analysis

NATIONAL DATA

EPA and State Enforcement Activity for NPDES Majors- 3 Year Trend

Regions 9 and 10 have very poor data quality and the data are unreliable.

B.1 Inspections

Inspections	**1999**	**2000**	**2001**
Number of Inspections	5,178	5,178	4,780
Inspection Coverage (Percent of major facilities inspected)	78%	78%	72%
Number of Inspections at Federal Facilities	140	126	
Percent of all Inspections at Federal Facilities (Note: Federal Facilities make up 2% of majors)	3 %	2 %	

B.2 Informal and Formal Actions

Informal and Formal Actions	**1999**	**2000**	**2001**
Number of Informal Actions	530	386	269
Total Number of Formal Actions:	645	689	577
- State Formal Actions	410	527	447
- EPA Formal Actions	235	162	130
Percent of SNC Facilities Addressed by Formal Action	15%	14%	13%
Percent of SNC Facilities Addressed by Formal Action within 90 Days - (Timely and Appropriate Action)	13%	9%	9%
Percent of Perpetual SNC Facilities with One or More Formal Actions (by State and EPA) within 2 years	--	--	33%
Percent of Enforcement Actions Resulting in Improvements in Environmental Management (Non-physical Complying Actions)	82 %	68 %	60 %
Number of Formal Actions at Federal Facilities	9	12	
Percent of all Formal Actions at Federal Facilities (Note: Federal facilities make up 2% of majors)	1 %	2 %	

B.3 Case Initiations and Settlements

Case Initiations and Settlements	1999	2000	2001
Total Case Initiations:	762	905	564
- ACOs	547	587	380
- APO Complaints	181	291	131
- DOJ Referrals	34	27	53
Total Case Settlements:	712	887	557
- ACOs	518	573	359
- APO Settlements	172	295	173
- Judicial Settlements	22	19	25

B.4 Penalties , SEPS, and Injunctive Relief

Penalties and SEPs and Injunctive Relief	1999	2000	2001
Total EPA Penalties:(DOCKET)			$4,468,636
- EPA Judicial Penalties			$ 199,847
- EPA Administrative Penalties			$4,268,789
*Percent of EPA and State Formal Actions with Monetary Penalty (All Majors) (OTIS)	40%	44%	39%
Average Administrative Penalty Size per Formal Action for Majors			EPA $ 6,205 State $ 6,455
Average Civil Judicial Penalty Size per Formal Action for Majors			EPA $ 4,996 State $ 5,637
*Total Value of SEPs	$8,840,340	$10,043,653	$2,482,540
*Total Value of Injunctive Relief	$574,811,491	$657,094,386	$213,594,314
Penalties at Federal Facilities	$ 0	$ 0	$0

*States are not required to report these data , therefore these data are not reliable for meaningful analysis.

Formal actions include administrative penalty complaints.
Criminal cases are not included.

B.5 Perpetual and Repeat SNCs with Actions (OTIS 9/30/02)

	Number of Major Facilities	**Percent of the Majors Universe (6,637)**	**Percent of All Majors in SNC (1,608)**	**Percent with Formal Action in Last 2 Years**
Perpetual SNC	93	1%	6%	32 %
4Quarter Repeat SNCs	560	8%	35%	33 %
2 Quarter Repeat SNCs	1,334	20%	83%	27 %

Note: Perpetual SNCs are captured in counts for two and four quarter repeat SNCs, and two quarter repeat SNCs are captured in counts for four quarter repeat SNCs.

Sixty eight percent (68%) of perpetual SNCs have not had a formal action in 2 years.

B.6 Perpetual and Repeat SNCs with Actions by Facility Type (OTIS 9/30/02)

Facility Type	Percent of all Majors	# SNCs	% Formal Action in Last 2 Years	# Perpetual SNCs	% Formal Action in Last 2 Years	# 4 Quarter Repeat SNCs	% Formal Action in Last 2 Years	# 2 Quarter Repeat SNCs	%Formal Action in Last 2 Years
% Federal Facilities	2%	43	0.1%	3	1%	13	0.3%	30	0.2%
% Municipal Facilities	62%	1,547	18%	72	28%	393	26%	899	21%
% Industrial Facilities	36%	744	6%	18	3%	154	6%	404	6%
All Facility Types	100%	2,337	24%	93	32%	560	33%	1,334	27%

Other 2001 Data

States inspect 60% - 90% of the population and EPA inspects less than 20% of the population.

We *are* more likely to take actions in areas with high percentage (>25%) of minorities. (59% of repeat SNC facilities in EJ sensitive areas receive no formal action compared to 70% in non-EJ)

Data Gaps

Data are not available on the following areas for NPDES Majors:
- capacity building

- compliance assistance activity counts and outcomes
- incentives and outcomes from incentives
- responses to citizen complaints

REGIONAL DATA

Inspections

Ninety seven percent of majors have been inspected nationally between 1997 and 2001, with the Regional rates ranging from 92% and 100%. Ninety one percent of majors have been inspected in either 2000 or 2001, with the Regional rates ranging from 75% to 98%. Region 10 has inspected 75% - the other regions range from 85% to 98%.

Informal and Formal Actions

B.7 EPA and State Formal Actions - 3 Year Trends

Shaded boxes are regions with a low percentage of actions relative to their universe of SNCs.

Region	# and % of All Majors	# and % of All Major SNCs	Percent of all 1999 Formal Actions	Percent of all 2000 Formal Actions	Percent of all 2001 Formal Actions
1	456 (7%)	156 (9%)	4 %	3 %	3 %
2	605 (9%)	99 (6%)	15 %	17 %	18 %
3	739 (11%)	124 (7%)	5 %	12 %	8 %
4	1,393 (21%)	349 (21%)	8 %	11 %	15 %
5	1,161 (18%)	368 (22%)	6 %	2 %	6 %
6	1,024 (15%)	349 (21%)	52 %	42 %	35 %
7	390 (6%)	120 (7%)	2 %	2 %	2 %
8	269 (4%)	50 (3%)	1%	1%	3 %
9	326 (5%)	30 (2%)	3 %	4 %	4 %
10	289 (4%)	25 (1%)	5 %	4 %	6 %

B.8 EPA and State Formal and Informal Actions at Majors- 3 Year Totals 1999-2001
Shaded boxes are regions with a low percentage of actions relative to their universe of SNCs.

Region	# and % of All Majors	# and % of All Major SNCs	Percent of SNC Universe	Percent of all Formal Actions 1999 - 2001	Percent of all Informal Actions 1999 - 2001 (EPA and State)
1	456 (7%)	156 (9%)	9 %	3 %	.4 %
2	605 (9%)	99 (6%)	6 %	17 %	1.9 %
3	739 (11%)	124 (7%)	7 %	9 %	3.8 %
4	1,393 (21%)	349 (21%)	21 %	11 %	22 %
5	1,161 (18%)	368 (22%)	22 %	5 %	6.9 %
6	1,024 (15%)	349 (21%)	21 %	44 %	56.7 %
7	390 (6%)	120 (7%)	7 %	2 %	6.1 %
8	269 (4%)	50 (3%)	3 %	2 %	.2 %
9	326 (5%)	30 (2%)	2 %	4 %	0
10	289 (4%)	25 (1%)	1 %	5 %	1.4 %

B.9 Addressing SNCs with Formal Actions (State and EPA Actions) - 3 Year Trends
Shaded boxes represent those equal to or less than the national average.

Percent of SNCs Addressed						
	1999		2000		2001	
Region	Addressed with Formal Actions	Addressed Timely and Appropriately	Addressed with Formal Actions	Addressed Timely and Appropriately	Addressed with Formal Actions	Addressed Timely and Appropriately
1	21 %	14 %	18 %	6 %	19 %	14 %
2	3 %	7 %	7 %	8 %	8 %	9 %
3	24 %	14 %	14 %	5 %	22 %	11 %
4	5 %	6 %	8 %	6 %	7 %	5 %
5	9 %	13 %	8 %	7 %	6 %	7 %
6	37 %	24 %	31 %	17 %	24 %	14 %
7	5 %	6 %	11 %	9 %	8 %	2 %
8	3 %	2 %	2 %	2 %	2 %	0 %
9	20 %	15 %	19 %	9 %	23 %	0 %
10	37 %	22 %	18 %	14 %	17 %	7 %
National	15 %	13 %	14 %	9 %	13 %	9 %

Timely & appropriate applies to those new SNCs with an action OR returned to compliance on their own.

Nationally and by Region, the percentage of SNCs addressed has been consistent, but at low percentages (15%, 14%, 13%). Regions 2, 4, 5, and to a lesser degree, 7 have consistently addressed a low percentage of their SNCs, and Region 8 has only addressed 3%, 2% and 2% for the 3 years considered.

B.10 Perpetual SNCs with Actions 2001

Shaded boxes represent those with less than ≤50% addressed with formal action.

Region	Number of Perpetual SNCs	Percent of All Perpetual SNCs (93)	Percent of Perpetual SNCs with Formal Action in Last 2 Years
1	9	10 %	11 %
2	1	1 %	0 %
3	4	4 %	50 %
4	34	37 %	41 %
5	25	27 %	16 %
6	11	12 %	66 %
7	6	6 %	17 %
8	2	2 %	50 %
9	1	1 %	0 %
10	0	0 %	0 %
National	93	100 %	33 %

Data show that 49% of facilities nationally recover from SNC status on their own, without an action from EPA or state.

B.11 Regional Percent of All Penalties, SEPS and Injunctive Relief 1999 - 2001 (DOCKET)

Shaded boxes are regions with low percentages relative to their percent of the SNC universe. This table refers to dollar amounts - not number of cases with SEPs or penalties.

Region	Percent of All Majors in SNC	% of All Penalties for Majors	% of All SEPs for Majors	% of All Penalties and SEPs Combined for Majors	% of All Injunctive Relief for Majors
1	9 %	5 %	34 %	16 %	15 %
2	6 %	10 %	8 %	9 %	1%
3	7 %	15 %	10 %	13 %	10%
4	21 %	23 %	1 %	15 %	50%

Region	**Percent of All Majors in SNC**	**% of All Penalties for Majors**	**% of All SEPs for Majors**	**% of All Penalties and SEPs Combined for Majors**	**% of All Injunctive Relief for Majors**
5	22 %	17 %	13 %	15 %	<1%
6	21 %	16 %	7 %	13 %	22%
7	7 %	1 %	<1 %	1 %	<1%
8	3 %	1 %	4 %	2 %	0%
9	2 %	7 %	14 %	9 %	0%
10	1 %	5 %	8 %	6 %	3%

B.12 Average Penalty Per Action 1999 - 2001
These data are from IDEA which includes Docket and PCS.
Shaded boxes are those with average penalties below the national average.

Region	Average Penalty per Action	Percent of Actions with Penalties
1	$ 1,415	6 %
2	$ 5,888	21 %
3	$ 976	17 %
4	$ 4,441	80 %
5	$ 1,231	5 %
6	$ 2,009	17 %
7	$ 2,906	34 %
8	$19,085	32 %
9	$ 176	3 %
10	$ 7,934	39 %
National	$ 3,552	41 %

A Note About Penalty Data
Penalty data are required in DOCKET. While there are some penalty data available in PCS, states are not required to enter it. Data from DOCKET shows national penalties at $35,828,059 for 1999-2001. For the same time period, PCS shows national penalties at $12,784,708. PCS shows average penalty at $14,065 and an OTIS management report for the same time period (all data sources) shows average penalty size of $3,486.

B.13 Percent of Actions Requiring *Non-Physical Compliance Actions
Shaded boxes have ≤ 50 % of actions requiring non-physical compliance actions.

Region	1999	2000	2001	1999-2001
1	73%	13 %	14 %	43 %
2	98 %	73 %	68 %	84 %
3	83 %	50 %	80 %	77 %
4	63 %	100 %	100 %	82 %
5	50 %	0 %	100 %	50 %
6	81 %	76 %	57 %	75 %
7	67 %	50 %	100 %	63 %
8				
9	0 %	100 %	43 %	40 %
10	67 %	0 %	50 %	44 %
Total	**82 %**	**68 %**	**60 %**	**73 %**

* Non-physical compliance actions include: ACC (Provide Site Access), AUD (Auditing), INF (Information Letter Request), LAB (Labeling/Manifesting), MTS (Monitoring/Sampling), OTH (Other (Please Describe)), PER (Permit Application), REC (Record Keeping), REP (Reporting), SAS (Site Assessment), RIF (RI/FS), TES (Testing), TRN (Training), or EMS (Environmental Management Review).

STATE DATA

Note: The following states have DMR entry rates below 95%: DC, AL, OH, WI, NM, TX, MO, NE, WY, AZ, HI, CA, NV, AK, ID. The following states have DMR entry rates below 91%: DC, WI, MO, NE, WY, AZ, HI, CA, NV, ID. (FY 2001)

Inspections

Percent of facilities inspected between 1997 and 2001 is 97% nationally. All but 3 states inspected 90% or more. MN, AZ and WA inspected 88%, 84% and 80% respectively.

Formal and Informal Actions

The following table highlights states with lower percentage of formal and informal actions than their percent of the SNC universe. *Most* states have a low percentage of actions relative to their percent of the SNC universe, implying that few states are responsible for a disproportionately large percent of the actions.

B.14 Percent of EPA and State, Informal and Formal Actions, 1999-2001

Shaded boxes are states with percent of actions lower than their percent of the SNC universe.

State	% of SNC Universe	# of informal actions	% of informal actions	# formal actions	% of formal actions
CT	1.9	0	0	33	1
MA	3.1	0	0	20	.6
ME	1.3	0	0	12	.4
NH	1.1	0	0	10	.3
RI	.7	19	.4 %	15	.5
VT	1	0	0	3	.1
NJ	.5	89	1.9 %	279	9
NY	4.9	0	0	115	4
DC	.2	0	0	2	.06
DE	no data	0	0	no data	--
MD	1.5	2	< .1 %	35	1
PA	2.8	3	< .1 %	39	1
VA	1.5	172	3.6 %	31	1
WV	1.3	2	< .1 %	59	2
AL	4.3	7	.1 %	48	2
FL	2.8	89	1.9 %	97	3
GA	1.1	110	2.3 %	184	6
KY	1.5	83	1.7 %	42	1
MS	1.8	211	4.5 %	30	1
NC	4.1	3	< .1 %	371	12
SC	1.2	529	11.3 %	158	5
TN	3.9	2	< .1 %	22	.7
IL	1.7	169	3.6 %	182	6
IN	4.0	39	.8 %	36	1.2
MI	3.9	0	0	32	1
MN	1.7	0	0	29	1
OH	6.4	117	2.5 %	27	.9
WI	5.0	0	0	6	.2
AR	1.3	591	12.6 %	62	2
LA	3.4	312	6.6 %	97	3
NM	.5	98	2 %	16	5.3

State	% of SNC Universe	# of informal actions	% of informal actions	# formal actions	% of formal actions
OK	1.4	215	4.6 %	142	5
TX	14.3	1,434	30.7 %	262	9
IA	1.9	288	6.1 %	29	.9
KS	1.3	0	0	10	.3
MO	2.5	0	0	28	.9
NE	1.3	0	0	21	.7
CO	.7	3	< .1 %	6	.2
MT	.5	2	< .1 %	2	.1
ND	.1	0	0	3	.1
SD	.2	2	< .1 %	3	.1
UT	.6	5	.1 %	15	.5
WY	.7	1	< .1 %		--
AZ	.6	0	0	4	.1
CA	1	0	0	178	6
HI	.1	0	0	4	.1
AK	.5	2	< .1 %	18	.6
NV	.1	0	0		--
ID	.3	7	.1 %	4	.1
OR	.2	55	1.1 %	31	1
WA	.4	6	.1 %	33	1
Total	100%	4,667	100 %	2,996	86%

B.15 Addressing SNCs with Formal Actions (State and EPA Actions) - 3 Year Trends
Shaded boxes represent those equal to or less than the national average.

Percent of SNCs Addressed						
	1999		2000		2001	
State	Addressed with Formal Actions	Addressed Timely and Appropriately	Addressed with Formal Actions	Addressed Timely and Appropriately	Addressed with Formal Actions	Addressed Timely and Appropriately
CT	3 %	59 %	7 %	57 %	5 %	6 %
MA	13 %	47 %	4 %	42 %	8 %	41 %
ME	7 %	59 %	13 %	63 %	15 %	60 %
NH	10 %	70 %	13 %	63 %	20 %	47 %
RI	20 %	60 %	0 %	50 %	13 %	75 %
VT	39 %	78 %	0 %	0 %	50 %	100 %
NJ	21 %	100 %	50 %	75 %	7 %	18 %
NY	6 %	60 %	6 %	72 %	13 %	67 %
DC	0 %	0 %	0 %	50 %	0 %	50 %
DE	--	--	0 %	0 %	-	--
MD	30 %	90 %	0 %	63 %	25 %	100 %
PA	10 %	53 %	0 %	51 %	10 %	61 %
VA	5 %	75 %	0 %	10 %	0 %	56 %
WV	25 %	70 %	20 %	65 %	15 %	57 %
AL	3 %	64 %	9 %	48 %	2 %	57 %
FL	7 %	67 %	8 %	32 %	11 %	58 %
GA	13 %	55 %	17 %	58 %	14 %	57 %
KY	0 %	82 %	13 %	43 %	8 %	38 %
MS	18 %	59 %	5 %	55 %	4 %	48 %
NC	14 %	35 %	0 %	57 %	0 %	49 %
SC	14 %	43 %	16 %	42 %	15 %	80 %
TN	0 %	64 %	0 %	53 %	2 %	64 %
IL	77 %	84 %	48 %	73 %	71 %	86 %
IN	5 %	46 %	3 %	52 %	2 %	42 %
MI	9 %	64 %	0 %	42 %	0 %	53 %
MN	5 %	52 %	13 %	38 %	10 %	60 %

Percent of SNCs Addressed						
	1999		2000		2001	
State	Addressed with Formal Actions	Addressed Timely and Appropriately	Addressed with Formal Actions	Addressed Timely and Appropriately	Addressed with Formal Actions	Addressed Timely and Appropriately
OH	2 %	39 %	4 %	43 %	1 %	58 %
WI	0 %	39 %	0 %	0 %	0 %	79 %
AR	25 %	50 %	13 %	40 %	22 %	43 %
LA	24 %	46 %	33 %	61 %	17 %	60 %
NM	13 %	100 %	11 %	33 %	13 %	63 %
OK	45 %	76 %	30 %	70 %	47 %	68 %
TX	21 %	71 %	11 %	57 %	10 %	64 %
IA	3 %	90 %	26 %	79 %	7 %	44 %
KS	0 %	40 %	0 %	65 %	0 %	56 %
MO	13 %	53 %	3 %	67 %	0 %	63 %
NE	0 %	14 %	14 %	57 %	0 %	25 %
CO	0 %	100 %	0 %	58 %	0 %	75 %
MT	0 %	100 %	0 %	100 %	0 %	44 %
ND	0 %	100 %	0 %	100 %	0 %	100 %
SD	0 %	67 %	0 %	100 %	0 %	50 %
UT	6 %	50 %	8 %	54 %	0 %	91 %
WY	0 %	75 %	0 %	38 %	0 %	33 %
AZ	14 %	57 %	0 %	43 %	0 %	33 %
CA	15 %	65 %	13 %	50 %	0 %	64 %
HI	--	--	--	--	0 %	0 %
AK	0 %	43 %	0 %	22 %	0 %	40 %
NV	--	--	--	--	0 %	100 %
ID	29 %	71 %	0 %	43 %	0 %	20 %
OR	50 %	75 %	50 %	100 %	50 %	50 %
WA	14 %	36 %	14 %	71 %	20 %	60 %
National	13 %	59 %	9 %	49 %	9 %	58 %

Timely & appropriate applies to those new SNCs with an action OR returned to compliance on their own.

Penalties
While there are some penalty data available in PCS, states are not required to enter it. State penalty data therefore incomplete and unreliable for purposes of meaningful analysis.

B.16 Perpetual SNCs (OTIS 9/26/02)
Shaded boxes are those with ≤65% of Perpetual SNCs addressed with formal action in last 2 years.

State	# Perpetual SNCs	% of all perpetual SNCs	# Perpetual SNCs with action in last 2 years	% Perpetual SNCs with formal action in last 2 years
MA	7	8 %	0	0 %
NH	2	2 %	1	50 %
NY	1	1 %	0	0 %
PA	2	2 %	0	0 %
MD	1	1 %	1	100 %
WV	1	1 %	1	100 %
AL	6	6 %	2	33 %
FL	6	6 %	1	17 %
KY	5	5 %	1	20 %
MS	10	11 %	6	60 %
NC	4	4 %	3	75 %
TN	3	3 %	1	33 %
IL	1	1 %	1	100 %
IN	6	6 %	0	0 %
MI	10	11 %	1	10 %
OH	7	8 %	2	29 %
WI	1	1 %	0	0 %
LA	3	3 %	1	33 %
OK	1	1 %	1	100 %
TX	7	8 %	5	71 %
NE	6	6 %	1	17 %
CO	1	1 %	0	0 %
SD	1	1 %	1	100 %
HI	1	1 %	0	0 %

Environmental Indicators
NPDES Majors Performance Analysis

NATIONAL DATA

Regions 9 and 10 have very poor data quality and the data are unreliable.

C.1 Environmental Indicator Data FY 1999-2001

	1999	2000	2001
*Percent of Enforcement Actions that Result in the Reduction, Elimination or Treatment of Pollutants	29 %	35 %	46 %
Percent of Effluent Limit Violations Causing SNC	--	--	25%
Percent of SNCs that are Effluent Related	--	--	50%

* These data are reported to docket but there is no way to distinguish which cases are for majors, except where a link can be made to a permit number in PCS. A total of 364 cases were linked to a major permit number in PCS (out of 577 majors with enforcement actions). Therefore, this data represents only a 63 % of cases with pollutant reductions for 2001. Additionally, data quality is low because of poor reporting. These data are not reliable for meaningful analysis.

C.2 FY 2001 Effluent Violations for Conventional Parameters and Percent Over Limit
Shaded boxes are the 4 highest number of exceedances per category.

Percent Over Limit	<20%	20% - 39%	40% - 59%	60%- 79%	80%- 99%	100%- 199%	200%- 499%	500%- 999%	>1,000%	Unk	Total
Number of Violations	2,918	2,073	1,263	879	687	1,536	1,234	487	580	57	11,714
Percent of All Violations	25%	18%	11%	8%	6%	13%	11%	4%	5%	<1%	100 %

C.3 2001 Effluent Violations for Toxic Parameters and Percent Over Limit
Shaded boxes are the 4 highest number of exceedances per category.

Percent Over Limit	<20%	20%- 39% (SNC limit)	40%- 59%	60%- 79%	80%- 99%	100%- 199%	200%- 499%	500%- 999%	>1,000%	Unk	Total
Number of Violations	845	798	515	374	485	817	994	454	832	107	6,221
Percent of All Violations	14%	13%	8%	6%	8%	13%	16%	7%	13%	2%	100 %

Note: There are an additional 28,286 effluent limit violations that are for neither conventional or toxic pollutants. Total effluent limit violations = 46,231

C.4 FY 2001 Inspection Coverage and Formal Actions at SNCs in 303(d) Listed Water Segments

	# in 303(d) listed water segments	# in 303(d) listed water segments that were **inspected** in last 2 years	# in 303(d) listed water segments that had a **formal action** in last 2 years	**Percent of SNCs in 303(d)** listed waters that had a **formal action** in last 2 years	**Percent of SNCs in NON 303(d)** listed waters that had a **formal action**
SNCs	498	475	114	23 %	24 %
Repeat SNCs	100	96	30	30 %	27 %
Perpetual SNCs	8	8	3	38 %	32 %

Many segments have not yet been characterized, so this probably undercounts facilities in priority water segments.

REGIONAL DATA

Note: Regions 3, 7, 9 and 10 have DMR entry rates below 95% (the national target). Region 9 has a DMR entry rate of 48%. (FY 2001)

C.5 Percent of Actions Requiring Pollutant Reductions, Elimination or Treatment
(Federal Actions Only)
Shaded boxes have ≤ 50 % of actions requiring pollutant reductions, elimination, or treatment.

Region	**1999**	**2000**	**2001**	**1999-2001**
1	33%	25 %	100 %	47 %
2	18 %	19 %	36 %	23 %
3	17 %	50 %	0 %	15 %
4	0 %	50 %	67 %	29 %
5	50 %	50 %	100 %	60 %
6	34 %	38 %	39 %	36 %
7	67 %	25 %	100 %	50 %
8	0 %	0 %	0 %	0 %
9	50 %	100 %	43 %	50 %
10	67 %	100 %	75 %	78 %
Total	**29 %**	**35 %**	**46 %**	**35 %**

C.6 Effluent Violations for Toxic Parameters and Percent Over Limit 2001
Shaded boxes are regions with higher percent of total toxic exceedances than percent of all SNCs. Diagonal bars are regions with ≥13 % of toxic exceedances over 1,000%.

Region	% of all major SNCs	Total # of Toxic Exceedances	# Toxic Excedances Over 1,000%	% of Region's Toxic Exceedances over 1,000%	%of All Toxic Exceedances
1	9%	788	86	11%	13%
2	6%	1,349	203	15%	22%
3	7%	797	50	6%	13%
4	21%	810	113	14%	13%
5	22%	1,009	127	13%	16%
6	21%	642	73	11%	10%
7	7%	167	27	16%	3%
8	3%	64	8	12%	1%
9	2%	531	141	27%	9%
10	1%	64	4	6%	1%
Total	100%	6,221	832	13%	100%

C.7 Effluent Violations for Conventional Parameters and Percent Over Limit 2001
Shaded boxes are regions with higher percent of total conventional exceedances than percent of SNCs.

Region	% of all major SNCs	Total # Conventional Exceedances	%of Total Conventional Exceedances
1	9%	1,249	11%
2	6%	2,127	18%
3	7%	710	6%
4	21%	2,465	21%
5	22%	1,868	16%
6	21%	1,618	14%
7	7%	873	7%
8	3%	179	2%
9	2%	421	4%
10	1%	204	2%
Natl.	100%	11,714	100%

STATE DATA

Note: The following states have DMR entry rates below 95%: DC, AL, OH, WI, NM, TX, MO, NE, WY, AZ, HI, CA, NV, AK, ID. The following states have DMR entry rates below 91%: DC, WI, MO, NE, WY, AZ, HI, CA, NV, ID. (FY 2001)

Percent of Actions Requiring Pollutant Reductions
This information is not currently tracked or reported by state.

C.8 Number of Effluent Violations for Toxic Parameters and Percent Over Limit 2001
Shaded boxes are states with higher percent of total toxic exceedances than percent of all SNCs. Diagonal bars are states with ≥13 % of toxic exceedances over 1,000%.

% Over Limit	% of All Major SNCs	Total # of Toxic Exceedances	# Toxic Excedances Over 1,000%	% of State's Toxic Exceedances over 1,000%	%of All Toxic Exceedances
CT	1.9	211	11	5.2%	3.4 %
MA	3.1	349	42	12%	5.6 %
ME	1.3	69	8	12 %	1.1 %
NH	1.1	93	15	16%	1.5 %
RI	.7	55	7	13%	1 %
VT	1	11	3	27%	.2 %
NJ	.5	17	2	12%	.3 %
NY	4.9	295	11	4%	4.7 %
PR	--	1,037	190	18%	17 %
DC	.2	0	0	0%	0
DE	--	5	0	0%	<.1%
MD	1.5	24	3	13%	.4 %
PA	2.8	222	15	7%	3.6 %
VA	1.5	416	15	4%	6.7 %
WV	1.3	130	17	13%	2.1 %
AL	4.3	85	9	11%	1.4 %
FL	2.8	233	38	16%	3.7 %
GA	1.1	93	11	12%	1.5 %
KY	1.5	37	3	8%	.6 %
MS	1.8	119	19	16%	2 %

% Over Limit	% of All Major SNCs	Total # of Toxic Exceedances	# Toxic Excedances Over 1,000%	% of State's Toxic Exceedances over 1,000%	%of All Toxic Exceedances
NC	4.1	117	16	14%	2 %
SC	1.2	39	3	8%	.6 %
TN	3.9	87	14	16%	1.4 %
IL	1.7	146	15	10%	2.3 %
IN	4.0	209	11	5%	3.4 %
MI	3.9	82	13	16%	1.3 %
MN	1.7	12	2	16%	.2 %
OH	6.4	491	80	16%	8 %
WI	5.0	69	6	9%	1.1 %
AR	1.3	34	10	29%	.5 %
LA	3.4	169	26	15%	2.7 %
NM	.5	12	0	0%	.2 %
OK	1.4	62	7	11%	.1 %
TX	14.3	365	30	8%	5.8 %
IA	1.9	53	3	6%	.9 %
KS	1.3	3	3	100%	<.1 %
MO	2.5	87	14	16%	1.4 %
NE	1.3	24	7	29%	.4 %
CO	.7	37	6	16%	.6 %
MT	.5	6	0	0%	<.1 %
ND	.1	0	0	0%	0
SD	.2	11	2	18%	.2 %
UT	.6	10	0	0%	.2 %
WY	.7	0	0	0%	0
AZ	.6	50	5	10%	.8 %
CA	1	440	136	31%	7 %
HI	.1	40	0	0%	.6 %
NV	.5	1	0	0%	<.1 %

% Over Limit	% of All Major SNCs	Total # of Toxic Exceedances	# Toxic Excedances Over 1,000%	% of State's Toxic Exceedances over 1,000%	%of All Toxic Exceedances
AK	.1	14	0	0%	.2 %
ID	.3	8	0	0%	<.1 %
OR	.2	13	0	0%	.2 %
WA	.4	29	4	14%	.5 %
Total	100%	6,221	832	13%	100 %

C.9 Distribution of Exceedances 2001

Shaded boxes are 3 categories with the most exceedances (by state)

% Over Limit	<20%	20%- 39% (SNC limit)	40%-59%	60%-79%	80%-99%	100%-199%	200%-499%	500%-999%	>1,000 %	Unk
Number of States with 1st or 2nd most exceedances in this category.	22	12	2	2	2	11	18	7	12	0

United States Senate

WASHINGTON, DC 20510

February 20, 2003

The Honorable Christine Todd Whitman
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Dear Administrator Whitman:

We are writing regarding your proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," printed in the Federal Register on December 30, 2002. We oppose the extension of the deadline for compliance by the oil and gas industry for the applicability of the regulation entitled, "National Pollutant Discharge Elimination System--Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges", and commonly referred to as the "stormwater phase II regulation."

You propose to use this two-year extension to evaluate the impact of the regulation on the oil and gas industry. You base the need for this additional evaluation on information from the U.S. Department of Energy which EPA uses to estimate oil and gas starts per year. We have serious questions about the accuracy and relevance of this information. During the two-year extension, EPA proposed to evaluate the impacts on the oil and gas industry, particularly the apparent 30,000 sites. Not only is this number seriously questionable, but the impacts on the oil and gas industry were reviewed during the development of the 1999 regulation. The 1999 record contains voluminous evidence of this review. In addition, the stormwater phase II rule has been in place for three years, giving those subject to the requirements of the rule adequate time to prepare. During the two-year postponement for the oil and gas industry, small towns and communities around the nation with limited resources will be complying with this rule. Delaying compliance for one industrial sector is not justified.

In the preamble to the stormwater phase II regulation, EPA states, "...EPA believes that implementation of Best Management Practices (BMP) controls at small construction sites will also result in a significant reduction in pollutant discharges and an improvement in surface water quality...Expected benefits [of the rule as a whole] include reduced scouring and erosion of streambeds, improved aesthetic quality of waters, reduced eutrophication of aquatic systems, benefit to wildlife and endangered and threatened species, tourism benefits, biodiversity benefits and reduced costs for siting

reservoirs." Postponement of the stormwater phase II requirements for construction sites in the oil and gas industry will only reduce the water quality benefits of the regulation.

We are aware that EPA may be asked to evaluate the applicability of exempting the oil and gas industry from the stormwater phase II regulation based on criteria established by Section 402(l)(2) of the Clean Water Act, which allows certain types of discharges from oil and gas activities to occur without an NPDES permit. Specifically, the statute lists three main criteria to determine if this provision applies to a particular discharge:

- First, the discharge must be *"stormwater runoff from mining operations or oil and gas exploration, production, processing, or treatment operations or transmission facilities..."*
- Second, the flow must be *"composed entirely of flows which are from conveyance or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff..."*
- Third, the flow must be *"not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations."*

Section 402(l) clearly applies only to particular types of discharges from particular types of systems. It does not provide authority for a blanket exemption to the Clean Water Act NPDES permiting requirements. A number of questions arise with regard to the application of Section 402(l)(2) to the phase II program. We would like your responses to these questions. What is the difference between flows from conveyances or systems of conveyances and the discharges resulting from a construction project? Does this language describe the contamination status of the flows to which section 402(l) can be applied? If so, what is it?

Another argument that we are aware that you may hear for postponing the regulation for oil and gas construction sites covered by the stormwater phase II regulation is that these sites are relatively small, and therefore should be exempted. In the stormwater phase II regulation, EPA states, "EPA believes that the water quality impact from small construction sites is as high or higher than the impact from larger sites on a per acre basis. The concentration of pollutants in the runoff from smaller sites is similar to the concentrations in the runoff from larger sites." It is clear based on EPA's own analysis the fact that a construction site is small does not determine its water quality impact. The elimination of a large number of small construction sites in the oil and gas industry from the stormwater phase II regulations would clearly limit its ability to protect water quality.

We are also aware that during this evaluation period, you may be asked to exempt the oil and gas industry not only from the stormwater phase II requirements, but also from the current phase I program. The stormwater phase I requirements have been in

place since 1990. Any action to exempt these discharges from permitting requirements more than ten years after they were first required to be permitted would be a step backward in water quality protection.

As states and localities continue to dedicate limited time and funding resources toward developing phase II implementation plans by March 2003, we urge you to retain the existing deadlines for the oil and gas industry to come into compliance with the stormwater phase II regulation. Section 402(l) of the Clean Water Act does not support the exemption of construction activities at oil and gas sites from stormwater permitting. The potential negative water quality impacts of the delay in implementation of the phase II regulation and any action to exempt construction, either large or small, from stormwater regulations are significant and should be avoided.

Sincerely,

Jim Jeffords

Ron Wyden

Paul Sarbanes

Barbara Boxer

Frank Lautenberg

Russ Feingold

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 17 2003

THE ADMINISTRATOR

The Honorable James M. Jeffords
United States Senate
Washington, D.C. 20510

Dear Senator Jeffords:

Thank you for your letters dated February 20, 2003 and March 6, 2003 regarding the U.S. Environmental Protection Agency's (EPA) postponement of the requirement to obtain a storm water permit for certain oil and gas construction activities. I appreciate and share your concern regarding the importance of protecting the environment in as responsible a manner as possible.

EPA published this proposed rule modification on December 30, 2002. The comment period ended on January 29, 2002. EPA did not receive any requests to extend the comment period. The Agency did receive numerous comments on the proposed rule, many of which address the same issues raised in your February 20th letter. The responses to these comments are enclosed.

You have raised a number of questions about the information used by the Agency in deciding whether to postpone the permit application deadline for the oil and gas industry. In fact, due primarily to increased demand for natural gas, the Department of Energy's EIA (Energy Information Administration) and other federal agencies have forecast that the number of oil & gas wells drilled in the U.S. for 2003 and the foreseeable future will probably fall in the range of 30,000 - 35,000 wells per year. It is important to note that the Agency's decision was not based only on information prepared by EIA. EPA used the information prepared by DOE, which was consistent with the information we received from a number of sources regarding the average number of oil and gas exploration and production facilities that would be subject to the Storm Water Phase II regulations. During the comment period, the Agency also received data directly from States, the regulated community and other entities which also called into question earlier estimates of the number of sites that would be affected by the rule.

In response to your comments and others, the Agency must now undertake a renewed effort to analyze and better evaluate: the impact of the permit requirements on the oil and gas industry; the appropriate best management practices for preventing contamination of storm water runoff resulting from construction associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities; and the scope and effect of 33 U.S.C. 1342 (l)(2) and other storm water provisions of the Clean Water Act. The Agency will use the next two years to work with States, the regulated community and other

entities to ensure that we are using the best data possible as we work towards improving regulations that protect our land and water.

EPA will formally consider your March 6 letter in the context of the Agency's Information Quality Guidelines referred to in your letter. As you know, under the guidelines, affected persons may request a correction of the data EPA used to support a regulation, and the guidelines establish a process for responding to such requests.

Again, thank you for sharing your concerns on this issue. Should you need additional information or have further questions, please contact me or your staff may call Steven Kinberg, Office of Congressional and Intergovernmental Relations, at (202) 564-5037.

Sincerely yours,

Christine Todd Whitman

Attachments

United States Senate

WASHINGTON, DC 20510

March 6, 2003

The Honorable Christine Todd Whitman
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Dear Administrator Whitman:

We are writing regarding your proposed rule entitled, A Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land, printed in the Federal Register on December 30, 2002, and hereafter referred to as the "proposed regulation." This letter is a follow-up to our correspondence on February 20, 2003. We have requested a meeting with your staff to review that letter, and we hope we are able to do so soon.

We have serious questions about the quality of the information contained in the proposed regulation and the way in which EPA presents it. To help resolve these concerns, we asked the General Accounting Office (GAO) to conduct an evaluation of this information. The GAO provided a verbal briefing on February 24, 2003 that identified a number of critical flaws. In issuing this proposed rule, we believe that you have violated both the letter and the spirit of the Data Quality Act (P.L. 106-554, section 515(a)).

We are writing to you today to request a correction of information under that Act. In accordance with EPA Guidelines For Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency (December 2002), hereafter referred to as the "Guidelines", we expect that you will complete consideration of this request prior to issuance of a final rule. Based on your findings, we expect that you will suspend activity on your proposed rulemaking due to the failings of the data used to justify it.

The information described above and cited in proposed rule entitled, A Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That

Disturbs One to Five Acres of Land, printed in the Federal Register on December 30, 2002 does not comply with EPA or OMB guidelines for Data Quality. [1]

Standards of Performance for Information

The Guidelines apply to information EPA disseminates to the public.[2] It is clear that the Guidelines apply to the proposed regulation and that the standard of performance for influential information[3] should be used in this case.

The Guidelines state that EPA initiates a distribution of information if:

> EPA distributes information prepared or submitted by an outside party in a manner that reasonably suggests that EPA indorses or agrees with it; if EPA indicates in its distribution that the information supports or represents EPA's viewpoint; or if EPA in its distribution proposes to use or uses the information to formulate or support a regulation, guidance, policy, or other Agency decision or position.[4]

In its proposed regulation, EPA is using information prepared by the Department of Energy's Energy Information Administration (EIA) as the basis for its hypothesis that there may be an impact of this regulation on the oil and gas industry that it did not consider previously. The Agency then uses this hypothesis as the basis for the proposed regulation and the reason for postponing the permit deadline for the storm water phase II regulation for the oil and gas industry. [5] In its proposed regulation, EPA endorses the EIA data, indicates that the existence of the EIA data is the basis for changing EPA's belief regarding the impact of the storm water phase II regulation on the oil and gas industry, and uses the EIA data to formulate and to support its proposed regulation. Clearly, the Guidelines apply in this case.

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[1] Office of Management and Budget (OMB) Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002, pp. 8452 – 8459; Environmental Protection Agency (EPA) Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002.

[2] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, p. 15; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002, p. 8453-8454.

[3] Ibid., p. 19; Ibid., p. 8452, 8455, 8459-8460.

[4] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, p. 15-16.

[5] EPA proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," Fed. Reg. Vol. 67 No. 250, December 30, 2002.

The Guidelines also identify a higher standard of performance for "influential information." [6] The Guidelines state that influential information means "that the Agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact (i.e., potential change or effect) on important public policies or private sector decision.[7] In this case, the information in question is clearly influential. EPA uses the information to justify extending a permit deadline for two years during which time EPA will consider, among other things, exempting an entire industry from permit requirements.[8] EPA and OMB indicate in their Guidelines that influential information should be held to a higher standard of quality. Specifically, EPA states, "A higher degree of transparency about data and methods will facilitate the reproducibility of such information by qualified third parties, to an acceptable degree of imprecision."[9] The following discussion will demonstrate that EPA's proposed regulation fails to meet the performance standards for data quality established by its Guidelines.

Information Fails to Comply with Guidelines

The purpose of the OMB and EPA guidelines is to comply with the Data Quality Act which seeks to "ensure and maximize the quality, including objectivity, utility and integrity of disseminate information." [10] Objectivity focuses on whether the disseminated information is being presented in an accurate, clear, complete and unbiased manner, and as a matter of substance, is accurate, reliable, and unbiased. Integrity refers to security, such as the protection of information from unauthorized access or revision, to ensure that the information is not compromised through corruption or falsification. Utility refers to the usefulness of the information to the intended users.[11] The proposed regulation fails to meet each of these standards.

In your proposed regulation, you propose to postpone the permit deadline from March 10, 2003 to March 10, 2005 to "allow time for EPA to analyze and better evaluate

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[6] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, p. 19; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002,p. 8452, 8455, 8459-8460.

[7] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, p. 19; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002, p. 8455, 8460.

[8] EPA proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," Fed. Reg. Vol. 67 No. 250, December 30, 2002

[9] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, page 19; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002, pp. 8452, 8459-8460.

[10] P.L. 106-554.

[11] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, page 15; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002, pp. 8459-60.

the impact of the permit requirements on the oil and gas industry...." [12] There are four main pieces of information in this proposal that fail to meet the standards in the EPA Guidelines.

You base the need for this additional evaluation on "recent information from the U.S. Department of Energy"[13] that EPA uses to estimate oil and gas starts per year. Section II of the proposed rule states, "Based on recent information from the U.S. Department of Energy, EPA now estimates that on average there are 30,000 oil and gas starts per year, including exploration and development activities."[14]

This section goes on to say, "Initially, EPA assumed that very few of these starts would incur compliance costs associated with the Phase II rule because most of them would be less than one acre. However, based on new information, EPA now believes that a significant number of such sites may exceed one acre." [15]

Section III of the proposed rule states, "Since January 2002, information has become available indicating that close to 30,000 oil and gas sites may be affected by the Phase II storm water regulations." [16]

The number "30,000",[17] used by EPA to justify its proposed regulation, is supported in the EPA docket only by Table 5.2, entitled, "Crude Oil and Natural Gas Wells Dilled," [18] produced by the EIA and published in its Monthly Energy Review. There is no additional supporting information.

The most egregious failure comes in the area of objectivity. Both EPA and OMB Guidelines require that the disseminated information be presented in an accurate, clear, complete and unbiased manner, and as a matter of substance, is accurate, reliable, and unbiased. [19] The data presented in this proposed regulation does not meet this standard.

First, the number 30,000 is presented in the proposed regulations as "recent"[20] data. Table 5.2 shows that this data has been presented by EIA since 1978,[21] making it impossible to accurately call this data "recent."

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[12] EPA proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," Fed. Reg. Vol. 67 No. 250, December 30, 2002, Summary.
[13] EPA proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," Fed. Reg. Vol. 67 No. 250, December 30, 2002, Section II.
[14] Ibid.
[15] Ibid.
[16] Ibid., Section III.
[17] Ibid.
[18] EPA Docket ID: OW-2002-0068-0005.
[19] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, p. 15; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002, p. 8459.

Second, the proposed regulation indicates that "on average" there are 30,000 oil and gas starts per year.[22] However, there is no explanation for how this number was derived, making it impossible for the average user of this data to understand its development. Staff discussions with EPA indicate that this number was developed using 2000 through 2002 data and finding the average. However, the average number of reported wells drilled for 2000 to 2002 was 28,839. The number of reported oil, gas, and dry wells drilled in 2002 was 24,540. The average number of reported wells for the last ten years was 24,588. Over the last five years, the average was 25,629. In addition, in 2001, the monthly average of drilling rigs in operation for natural gas was the highest ever recorded by EIA since it began reporting this statistic in 1988,[23] which, if 2001 is used in calculating an average number of oil and gas starts per year, would skew the results upward.

Third, according to the GAO, the reported number of wells drilled per Table 5.2 includes both onshore and offshore wells. Yet, EPA fails to identify this fact in its proposed regulation. In addition, EPA fails to include an explanation as to why the number of offshore wells drilled per year should be used as part of justification for a two-year delay in the permit deadline for a storm water regulation that has no effect on offshore wells.

Fourth, section II of the December 30, 2002 rule states, "Based on recent information from the U.S. Department of Energy, EPA now estimates that on average there are 30,000 oil and gas starts per year, including exploration and development activities. Initially, EPA assumed that very few of these starts would incur compliance costs associated with the Phase II rule because most of them would be less than one acre. However, based on **new** [*emphasis added*] information, EPA now believes that a significant number of such sites may exceed one acre.[24] The third sentence in this quote indicates that some "new" information has led them to believe that a significant number of such sites may exceed one acre. The only data included in the docket accompanying this regulation is Table 5.2, which includes no information at all regarding the size of an average oil and gas start.[25] The Agency has failed to provide any information to support its belief that a significant number of sites may exceed one acre.

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[20] EPA proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," Fed. Reg. Vol. 67 No. 250, December 30, 2002, Section II.
[21] EPA Docket ID: OW-2002-0068-0005.
[22] EPA proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," Fed. Reg. Vol. 67 No. 250, December 30, 2002, Section II.
[23] Energy Information Administration, Monthly Energy Review, January 2003, Table 5.1.
[24] EPA proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," Fed. Reg. Vol. 67 No. 250, December 30, 2002, Section II.
[25] EPA Docket ID: OW-2002-0068-0005.

EPA based its entire proposal to extend the permit deadline for the storm water phase II regulation on "recent"[26] information that identified "30,000"[27] oil and gas starts per year, that "new" information now leads EPA to believe that they are larger than one acre and subject to the storm water phase II regulations. [28] The description of each of these data elements above demonstrates that EPA has failed to meet even the most basic standard of objectivity.

EPA's proposal has additional problems with accuracy, further demonstrating the Agency's failure to meet the objectivity standards[29] of the Guidelines as well as the integrity standards.[30]

Table 5.2, which EPA accepts without validation and uses as the basis for its proposed regulation, has several serious flaws. First, the EIA does not collect drilling data itself. The EIA estimates are based on partial data available from the American Petroleum Institute. The estimates are subject to continuous revision. This information is clearly articulated in EIAs Monthly Energy Review. [31] Second, EIA has reported problems with drilling activity data in the past. A 1998 EIA report notes that " drilling activity which were published or otherwise distributed by EIA prior to February 1998 are substantially in error."[32] Third, in a 1999 report on oil and gas drilling activity data, EIA notes that all work with the raw data and all initial processing are conducted outside EIA. EIA states that: "Such an 'arms-length relationship with the basic data does not facilitate familiarity with the data, and it hampers efforts to investigate concerns about the data."[33] EIA concludes that, "EIA does not collect the raw data itself, so some data errors may remain extremely difficult to discover, identify, and remedy in a timely manner." [34]

Thus, EPA's reliance on one data point that is so flawed violates the objectivity standard of the Guidelines. In addition, EPA does not meet the integrity standard of the Guidelines by failing to ensure that the data, which is not controlled or collected by EPA, EIA, or any government entity, is protected.[35].

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[26] EPA proposed rule entitled, "Modification of National Pollutant Discharge Elimination System (NPDES) Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity That Disturbs One to Five Acres of Land," Fed. Reg. Vol. 67 No. 250, December 30, 2002, Section II.
[27] Ibid., Section II.
[28] Ibid., Section II.
[29] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, page 15; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002, pp. 8459-60.
[30] Ibid.
[31] EIA Monthly Energy Review, January 2003, p. 86.
[32] EIA Natural Gas Monthly, March 1998, p. vii.
[33] Trapmann, William and Shambaugh, Phil. EIA: EIA Completes Corrections to Drilling Activity Estimates Series, 1999, p. 10.
[34] Trapmann, William and Shambaugh, Phil. EIA: EIA Completes Corrections to Drilling Activity Estimates Series, 1999, p. 10.
[35] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, page 15; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002, pp. 8459-60.

Finally, the information used by EPA to justify its proposed regulation fails to meet the utility standard in the Guidelines.[36] The proposed regulation fails to identify even the most readily identifiable problems with Table 5.2. EPA's acceptance of the EIA data without validation or verification and its presentation to the public as an accepted fact without identifying any of the data problems we raise in this letter prevents an average person from reviewing EPA's proposed regulation and developing an informed response.

In reviewing the Guidelines while preparing this document, several questions arose. First, the Information Quality Guidelines, EPA states that "There are many tools that the Agency uses such as the Quality System, review by senior management, peer review process, communications product review process, the web guide, and the error correction process." [37] EPA also indicates that it seeks input from experts and the general public, and that it consults with groups such as the Science Advisory Board and the Science Advisory Panel.[38] Which of these tools were used in preparing the proposed regulation—include full citation here...rule on storm water phase II published in the Federal Register on December xx, 2002?

The EPA Information Quality Guidelines contain a section entitled, "Does EPA Ensure and Maximize the Quality of Information from External Sources?" [39] It indicates that since 1998, the use of environmental data collected by others or for other purposes has been within the scope of the Agency's Quality System.[40] Please explain how the data used by EPA to justify the December xx 2002 proposed regulation regarding storm water phase II met the standards of this system before being published in the Federal Register.

Based on the preceding analysis, we are requesting a correction of the information used to justify EPA's proposed regulation.[41] We recommend that EPA suspend activity on the regulation until it can apply basic data quality control actions to this information, review the accuracy of the data the Agency is using to justify its actions, and re-evaluate the need for the regulation.[42] In conducting this review, we ask EPA to specifically evaluate each of the points we raise in this letter, in addition to any others that you may identify. We urge the Agency to recall the requirements in its Guidelines for "influential

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[36] Ibid.
[37] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, page 19.
[38] Ibid., p. 19.
[39] Ibid., p. 28.
[40] Ibid., p. 28.
[41] Ibid., p. 30.
[42] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, p. 30.

information" and ensure that the data used in this proposed regulation meets that standard.[43] In addition, in accordance with the Guidelines, we expect that you will complete consideration of this request prior to issuance of a final rule.[44]

The errors that EPA has made in accepting and presenting this data to the public are unacceptable. The presentation of faulty data as fact makes it impossible for the public to respond to EPA's proposal with full information. EPA's reliance on this faulty data has set into place a process that could delay water quality benefits and potentially eliminate them completely. In the preamble to the storm water phase II regulation, EPA states, "EPA believes that implementation of Best Management Practices (BMP) controls at small construction sites will also result in a significant reduction in pollutant discharges and an improvement in surface water quality....Expected benefits [of the rule as a whole] include reduced scouring and erosion of streambeds, improved aesthetic quality of waters, reduced eutrophication of aquatic systems, benefit to wildlife and endangered and threatened species, tourism benefits, biodiversity benefits and reduced costs for siting reservoirs."[45] Postponement of the storm water phase II requirements for construction sites in the oil and gas industry will only reduce the water quality benefits of the regulation.

In EPA's proposed regulation, you indicate that you will be analyzing and evaluating the scope and effect of 33 U.S.C. 1342(l)(2) which is an exemption for certain types of discharges from certain types of systems. The exemption of the storm water discharges covered by the phase II regulation will not only delay the water quality benefits described above, but also eliminate them completely.

At a time when EPA reports that 45% of our nation's waters remain impaired [46] and non-point source runoff is the leading source of impairment,[47] any action to roll back existing protections is imprudent. It is worth noting that one of the commenters on the Agency's proposal, the Warren County Conservation District in Pennsylvania, indicates that they have been regulating oil and gas industry construction projects under the storm water phase I regulations for ten year. They note that 70% of the oil and gas projects inspected between 1997 and 2002 were in violation of permit requirements.[48]

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[43] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, p. 19; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Fed. Reg. Vol. 67, No. 36, February 22, 2002,p. 8452, 8455, 8459-8460.
[44] EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA, December 2002, p. 32.
[45] EPA Final rule entitled, "National Pollutant Discharge Elimination System--Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges; Final Rule," Fed. Reg. Vol. 64, No. 235, December 8, 1999.
[46] Statement of G. Tracy Mehan, III , Assistant Administrator for Water U.S. Environmental Protection Agency Before the Committee on Environment
and Public Works, October 8, 2002.
[47] EPA National Water Quality Inventory, 2000 Report, p. ES-3.
[48] EPA docket ID No. OW-2002-0068-0023, -0024.

We believe that the correction of the information in the proposed regulation will demonstrate that there is no justification for EPA's proposal to extend the permit deadline for the storm water phase II regulation for the oil and gas industry. Your correction of the Agency's mistakes during this rulemaking process will protect water quality for future generations and protect the integrity of the rulemaking process. We can be contacted at the Committee address and phone number above. We look forward to hearing from you soon to discuss this matter.

Sincerely,

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 13 2003

OFFICE OF
WATER

The Honorable James M. Jeffords
United States Senate
Washington, D. C. 20510

Dear Senator Jeffords:

Thank you for your letter dated March 6, 2003 regarding the U.S. EPA postponement of the requirement to obtain an NPDES storm water permit for oil and gas construction activity that disturbs one to five acres of land. Your letter requested a correction of information supporting EPA's proposed regulation "Modification of National Pollutant Discharge Elimination System Permit Deadline for Storm Water Discharges for Oil and Gas Construction Activity that Disturbs One to Five Acres of Land" (67 *Federal Register* 79828, December 30, 2002) under the EPA Information Quality Guidelines.

During the public comment period on the proposed regulation, EPA received and considered numerous comments from the general public, environmental groups, other agencies, and industry representatives. The final regulation (68 *Federal Register* 11325, March 10, 2003) was signed on March 5, 2003.

Under the Agency's Information Quality Guidelines, EPA considers requests for corrections to information supporting a proposed rulemaking during the public comment period. Unfortunately, EPA received your letter after the final rule was signed. However, I would like to take this opportunity to respond to the concerns raised in your March 6, 2003 letter.

On December 8, 1999, the final Storm Water Phase II rule was published in the *Federal Register* (The National Pollutant Elimination System-Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges: Final Rule; 64 *Federal Register* 6872200). These regulations expanded the NPDES permitting program to require permit coverage by March 10, 2003 for, among other things, construction sites that disturb one to five acres. As part of that rulemaking, EPA developed an Economic Analysis (EA). In that EA, EPA assumed that few, if any, oil and gas exploration, production, processing, or treatment operations or transmission facilities would be affected by the final regulations. Since promulgation of the final Storm Water Phase II rule, EPA has received numerous letters from the oil and gas industry and States stating that a significantly larger number of sites would, in fact, be affected by our rule.

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In investigating these statements, EPA requested and used data from the Department of Energy's Energy Information Administration (EIA) regarding the average number of oil and gas exploration and production facilities that would be affected by final Storm Water Phase II regulations. The Agency also requested and received data directly from States, the regulated community and other entities on this issue. These data were subsequently utilized to gauge the impact of the Storm Water Phase II regulations and were of appropriate quality for this use. All of this information and data called into question our earlier estimates of the number of sites that would be affected by the regulations. Estimates from the EIA, States with oil and gas activity, and industry representatives, all forecast at least 30,000 onshore wells being drilled per year in the forseeable future. This was in direct contrast to the estimates available to EPA at the time of the promulgation of the Storm Water Phase II rule. Due to this great variation, EPA determined that additional time was needed to better and more accurately ascertain the potential impacts of a future rulemaking and therefore promulgated a final rule postponing until March 10, 2005, the requirement to obtain an NPDES storm water permit for oil and gas construction activity that disturbs one to five acres of land.

The final rule signed on March 5, 2003 does not call into question the need for controlling sediment from all types of construction, including oil and gas. It simply provides two years for the Agency to determine the best way to do so. We intend to use the next two years to work with States, the regulated community and other entities to ensure that we are using the best data possible as we work towards improving implementation of regulations that protect our land and water.

Again, thank you for sharing your concerns on this issue. If you have any further questions, please contact me, or your staff may call Steve Kinberg in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-5037.

Sincerely yours,

G. Tracy Mehan, III
Assistant Administrator

United States Senate

WASHINGTON, DC 20510

February 10, 2003

Christine Todd Whitman, Administrator
US Environmental Protection Agency
1101A USEPA Headquarters
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Whitman:

We are writing to express our concern over the general direction you are taking in the TMDL program and to provide our comments on your proposed rule published on December 27, 2002 to withdraw the July 2000 final rule revising EPA's Total Maximum Daily Load (TMDL) program under the Clean Water Act. We understand that this is step one in your plans to modify the TMDL program – the withdrawal of the July 2000 rule will be followed by publication of a new proposed rule changing the existing TMDL program. While you have not provided a draft of your proposed rule for review, your staff has provided a clear picture of your plans.

First, we believe that it is critical that EPA implement this program in order to clean up rivers, streams, lakes, beaches and other waterways throughout the country that still do not meet the designated use. While they are not perfect, the existing rules adopted by Presidents Reagan and George Herbert Walker Bush have the basic elements necessary to move this program forward. According to EPA, the overwhelming majority of the population of the United States – 218 million people – lives within 10 miles of a polluted river, lake, or coastal water. Almost 40% of these waters are not safe for fishing, swimming, boating, drinking water, or other needs. The 20,000 polluted bodies of water identified by the States include approximately 300,000 miles of river and shoreline and approximately 5 million acres of lakes that are polluted by discharges of sediment, nutrients, pesticides, heavy metals and pathogens. This pollution represents a real and daily threat to public health and to the wildlife that depend on clean water to sustain life.

The current TMDL program is now proceeding in watersheds across the country and has begun to show results. Between 1999 and the present, states report that about 7,300 TMDLs were completed. This compares with about 1,300 completed during the thirty years since enactment of the Clean Water Act. This program is finally maturing into an effective water pollution control tool, and it is making progress under the existing regulations. Your current proposal -- to withdraw the July 2000 rule without making additional modifications to the TMDL program -- would allow States to further accelerate the development of TMDLs by providing a stable regulatory climate.

However, we do understand that you are planning to release a new proposed rule making changes to the TMDL program. We believe that it is imperative that any new rule you propose

not curtail the law's ability to meet those remaining challenges and ensure the continued improvement of water quality. Based on the limited information you have provided, we already have several concerns with the changes you are considering to the TMDL program.

Under the existing TMDL program, TMDLs must include an implementation plan. It is then the responsibility of the State to implement the program through a Clean Water Act planning process. In the absence of State action on the implementation of a TMDL, EPA has the responsibility to implement the plan. Under the proposed revised rule, States would not have to submit implementation plans with the TMDL, and EPA would have a discretionary, rather than mandatory responsibility, to implement the TMDL. We question how a program with no legal mechanisms to ensure its implementation will keep our waters clean.

We understand that the new proposed rule would allow states greater leverage to take water bodies off their list of impaired waters. A more effective approach would be to improve data collection and monitoring methods under the existing rules than to give blanket discretion to states to avoid their responsibility to clean up impaired waters. EPA should insist on the listing requirements of the current rule to ensure that all impaired waters are cleaned-up.

We also have concerns with the water quality trading policy that would be a key component to the TMDL process. Water quality trading could certainly prove to be a more cost-effective and efficient way to help watersheds meet load allocations. But, it is imperative that any water quality trading program actually reduce pollution, not just move it around. We urge you to ensure that any water quality trading program you propose achieves this goal.

We believe that the agency's new proposal could slow needed progress by additional decades by relaxing schedules for setting TMDLs, reducing EPA's oversight role, allowing states to reclassify polluted waters as clean, and adopting other weakening changes to the current program. We strongly urge you not to propose any regulatory or other changes that would cripple this vitally important water clean up program, especially now as it is just starting to work in states across the country. To delay or derail the clean up of these waters would be a perfidious commemoration of the 30th anniversary of the Clean Water Act and a broken promise to future generations.

Sincerely,

Senator James M. Jeffords

Senator Bob Graham

Senator Edward Kennedy

Senator Barbara Boxer

Senator Frank Lautenberg

Senator Patrick Leahy

Senator Joseph Lieberman

Senator John F. Kerry

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 16 2003

THE ADMINISTRATOR

The Honorable James M. Jeffords
United States Senate
Washington, DC 20510

Dear Senator Jeffords:

Thank you for your letter of February 10, 2003, concerning the Environmental Protection Agency's (EPA's) preparation of a proposed rule that would amend regulations governing the Total Maximum Daily Load (TMDL) program. I certainly share your views about how important a strong TMDL program is to our continuing efforts to enhance the quality of the nation's waters.

While States are starting to make progress in implementing the TMDL program, I believe further improvements are both necessary and possible. Over the last year and a half, EPA has been holding public meetings and listening sessions to learn how to improve the TMDL program and avoid problems that the controversial TMDL rulemaking encountered in 2000. Our goal is to strengthen the science and improve accountability by cleaning up impaired waters more quickly and effectively. As we move forward, we will continue to use the recommendations made by the National Academy of Sciences, for example to improve identification of impaired waters and monitoring of water quality, as our guide. Any proposal will be subject to public review and comment, with additional public meetings and outreach, and significant opportunities for additional input.

With respect to EPA's recently-finalized water quality trading policy that you mention in your letter, we agree with you that the goal is to meet water quality standards in the most effective way. The final trading policy contains numerous provisions that emphasize that trading should maintain water quality standards, including designated and existing uses throughout the trading area.

Again, thank you for your letter. Should you need additional information or have further questions, please contact me or your staff may call Tom Dickerson, Office of Congressional and Intergovernmental Relations, at (202) 564-3638.

Sincerely yours,

Christine Todd Whitman

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United States Senate
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
WASHINGTON, DC 20510-6175

July 17, 2003

Marianne Lamont Horinko
Acting Administrator
US Environmental Protection Agency
1101A USEPA Headquarters
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Acting Administrator Horinko:

We have been following with great interest the progress of EPA's policy on water quality trading. As you are aware, EPA first initiated the integration of water quality trading with core Clean Water Act pollution control programs in the *Effluent Trading in Watersheds Policy* and *Draft Framework for Watershed-Based Trading* issued in 1996. These documents sought to articulate the conditions under which a water pollutant trading program could exist within the current regulatory structure of the Clean Water Act. On January 13, 2003, you announced the *Water Quality Trading Policy Statement* outlining EPA's general policy. We write to you today to comment on the final policy.

Pollutant trading is a promising regulatory mechanism. Based on EPA's own experience, trading programs have succeeded, in some circumstances, in meeting aggregate pollution reduction targets in less time and for less money than traditional regulatory approaches. The SO2 program of the 1990 Amendments to the Clean Air Act met SO2 reduction targets five years earlier than anticipated and for a quarter of the six to eight billion dollar cost originally estimated.

Although water quality trading has proved successful in some circumstances, special safeguards are necessary to ensure that trading actually reduces pollution, not just moves it around. Sustainable trading programs must be founded with clear legal authority and strong institutions of accountability if they are to be credible and effective. They must have clearly defined trading units to ensure a consistent and fair credit market. Trading programs must balance the increased flexibility to move pollution loads through trading with safeguards to prevent localized concentrations of pollutants. In short, to create a flawed or substandard trading policy at a time when these programs are beginning to gain broader acceptance could unnecessarily discredit an innovative and promising new regulatory method.

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It is clear that EPA incorporated many of the comments submitted in response to the draft policy issued in 2002. In particular, this policy states clearly that, "water quality trading and other market-based programs must be consistent with the Clean Water Act." It affirms the responsibility of states to develop TMDLs by stating, "if pre-TMDL trading does not result in the attainment of applicable water quality standards, EPA expects a TMDL to be developed."

However, we remain concerned that EPA has not addressed the more fundamental question of statutory authority. While this policy clearly states that States and tribes should develop a clear legal basis for trading programs, it is not clear that the Clean Water Act nor its regulations permit the establishment of trading programs to meet pollution control standards. The policy simply states that, "EPA believes that the Clean Water Act provides authority for EPA, states, and tribes to develop a variety of activities to control pollution, including trading programs" without articulating where the Act authorizes such activity. If EPA wishes to initiate fundamental changes to programs under the Clean Water Act, those changes should take place through legislation.

Second, the policy neglected certain essential components of productive, accountable, and safe trading programs. First, the trading policy fails to recognize the inherent risk of localized areas of pollution (or "hotspots") in pollutant trading. As you know, trading programs primarily monitor the aggregate level of pollution rather than individual points of discharges. If a trading program does not integrate safeguards to prevent hotspots, a localized area of water can be exposed to extraordinary and potentially hazardous levels of pollutants.

Further, this policy would allow localized concentrations of polluting substances other than nutrients and sediments. In particular, we are concerned that this policy would allow the trading of toxics, particularly persistent bio-accumulative toxics (PBTs). Water quality trading programs are a pragmatic methodology for reducing nutrient and sediment loads because localized concentrations of those substances are generally not harmful to the natural environment or public health. However, conventional pollutants and toxics cannot disperse through water the same way they disperse in air. Where a bird can avoid wider dispersions of air pollutants, a fish cannot jump out of the water to avoid high concentrations of water pollutants. In particular, trading programs should not trade toxics as they primarily affect the immediate area surrounding the point of discharge. Pollutant trading programs that cause localized concentrations of toxics, particularly PBTs, could expose the public and the environment to higher levels of toxins than through traditional clean water pollution control standards.

Third, the policy's broad use of "designated use" as the measure of degradation could prove problematic. The policy states that, "EPA does not support any use of credits or trading activity that would cause an impairment of existing or designated uses." This statement does not account for the fact that water bodies can differ greatly in size and still exist under a single standard of designated use. For example, both the Stevens Brook water body of the Lamoille watershed in Vermont (measuring only 1.5 miles in length) and the Michigan portion of Lake Superior (covering more than 16,400 sq. mi.) are single water bodies with single standards of designated use. Under this policy, trading programs in very large water bodies could cause severe localized concentrations of pollution larger than small bodies of water and still meet the conditions of the policy.

Fourth, a fixed and declining cap is needed in order for a pollutant trading scheme to be effective. Without an achievable limit to the amount of pollution that can be discharged into the receiving body, pollution credits will not achieve great enough value to provide the incentive to reduce pollution. This policy does not articulate any requirements for a pollutant cap.

New innovations in environmental policy are few and far between. Pollutant trading programs provide one intriguing possibility toward greater regulatory flexibility, lower costs, and improved environmental protection. However, the *Water Quality Trading Policy Statement* fails to address many fundamental issues of accountability, safety, and legality. We urge EPA to reconsider its implementation.

Sincerely,

James M. Jeffords
Ranking Member

Bob Graham
Ranking Member
Sub-Committee on Fisheries,
Wildlife, and Water

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 8 2003

THE ADMINISTRATOR

The Honorable James M. Jeffords
United States Senate
Washington, D.C. 20510

Dear Senator Jeffords:

Thank you for your letter dated July 17, 2003, regarding the Water Quality Trading Policy issued by the U.S. Environmental Protection Agency (EPA) on January 13, 2003. I appreciate your interest in this important environmental innovation.

The Clean Water Act (CWA) and EPA's implementing regulations establish a legal basis and authority for trading to achieve and maintain water quality standards. EPA's Water Quality Trading Policy provides States with guidance on how trading may occur consistent with the CWA and its implementing regulations. In your letter, you questioned the Clean Water Act authority for water quality trading and raised a number of concerns about EPA's Water Quality Trading Policy. I appreciate the opportunity to respond to your comments.

The starting place for understanding the legal authority for water quality trading is CWA section 301. Under CWA section 301(b), NPDES permits must contain technology-based effluent limitations and more stringent effluent limitations when necessary to meet applicable water quality standards. EPA has promulgated regulations at 40 CFR Part 122 specifying when water quality-based effluent limitations under CWA section 301(b)(1)(C) are necessary and how such limitations are to be derived. Among other things, EPA's regulations at 40 CFR § 122.44(d)(1)(vii) require the permitting authority to ensure that: (a) the level of water quality to be achieved by limits on point sources is derived from, and complies with, all applicable water quality standards; and (b) effluent limitations developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR § 130.7. To be lawful, a water quality-based effluent limitation must be consistent with the requirements of CWA section 301(b)(1)(C) and EPA's regulations at 40 CFR § 122.44(d)(1).

Under CWA section 301(b)(1)(C), water quality-based effluent limitations must also be calculated at levels that do not result in loadings that cause impairment of water quality standards, including designated uses. Where State or tribal water quality standards allow for mixing zones, the water quality-based effluent limitations must be consistent with the restrictions associated with those mixing zones, which should include conditions to protect against the

impairment of the designated use of the water body. Any localized impacts that would not be authorized by the State or tribal water quality standards, including the State or tribal mixing zone policy, could not be authorized in an NPDES permit. This, of course, would be true for effluent limitations based on a trade.

The requirements of CWA section 301(b)(1)(C) and EPA's regulations at Part 122 apply to all water quality-based effluent limitations, including those based on a water quality trade. If those requirements are met, the resulting water quality-based effluent limitation is lawful, even if it is based on a trade. By the same token, if a trade-based effluent limitation does not comply with the requirements of CWA section 301(b)(1)(C) and 40 CFR § 122.44(d)(1), under CWA section 402(a)(1) it cannot be contained in an NPDES permit. Nothing in the Trading Policy changes these fundamental requirements.

In addition to questioning the statutory basis for the Trading Policy, your letter expresses concern that the Trading Policy ignores a number of essential issues. As explained below, we believe the Policy adequately and appropriately considers those issues.

Regarding locally high pollutant concentrations or "hotspots," EPA's Trading Policy emphasizes no fewer than eight times that trading should maintain water quality standards (including designated/existing uses) throughout the trading area. The clear intent of these numerous references to water quality standards is that trading activity under EPA's policy must comply with requirements applicable to all NPDES permits including any requirements related to avoiding locally high pollutant concentrations that would cause an impairment of water quality standards. The Policy's repeated emphasis on the need to protect water quality standards indicates that the Policy does not support any trading that would cause localized impairments.

Your letter also expresses concern that EPA's policy would allow the trading of persistent bioaccumulative toxics. However, the Policy clearly states (page 4) that "EPA does not currently support trading of pollutants considered by EPA to be persistent bioaccumulative toxics (PBTs)." We recognize that the Policy does not *prohibit* trades involving those pollutants. As a matter of law, a policy document such as the Trading Policy cannot impose such a prohibition. The lawfulness of a trade involving PBTs would be determined by the CWA and its implementing regulations for establishing water quality standards, issuing NPDES permits, and developing and implementing total maximum daily loads (TMDLs). As a result, it is possible that trading of PBTs or other toxics may occur, but only if the trade is consistent with all applicable provisions of the CWA and Federal regulations, including section 301(b)(1)(C). At this time EPA has no plans to develop a policy to support trading of PBTs or to initiate pilot programs to pursue trading of PBTs.

Finally, your letter indicates concern that the Policy does not articulate requirements for a pollutant cap. As described below, the concept that trading occurs under a pollutant cap is integrated throughout the Policy and is articulated for pre-TMDL trading on page 5 of the Policy. The form of the cap will vary depending on whether trading is occurring under a TMDL or not,

and whether trading is being used on a watershed scale or to offset the impact of a single discharger. For impaired waters for which a TMDL has been approved or established by EPA, the cap is set by the TMDL at a level necessary to meet water quality standards. The Trading Policy supports trading that is consistent with the assumptions and requirements upon which the TMDL is established.

The Policy also supports pre-TMDL trading in impaired waters to achieve progress towards or the attainment of water quality standards. As stated on page 5 of the Policy, this may be accomplished by individual trades that achieve a net reduction of the pollutant traded or by a watershed-scale trading program that "*reduces loadings to a specified cap* supported by baseline information on pollutant sources and loadings" (emphasis added). For individual trades that involve point sources, the cap in most cases would be the sum of the trading partners' original water quality-based effluent limitations, which under CWA section 301(b)(1)(C) must be established at a level necessary to achieve water quality standards. Where a point source trades with a nonpoint source, the cap would be the point source effluent limitation and the nonpoint source load that is either "derived from" or "consistent with" water quality standards.

In addition, the Trading Policy supports trading to maintain levels of water quality higher than that necessary to protect and support designated uses consistent with federal antidegradation policy. The Policy encourages the use of trading to offset new or increased discharges through actual pollutant reductions obtained from other sources – so that no lowering of water quality occurs. In this case, the cap (under a State's antidegradation policy) would be the high level of water quality that was present in the receiving water before the introduction of the new or increased load.

In summary, EPA believes that its 2003 Trading Policy contains many safeguards for protecting and improving water quality and addresses the fundamental issues necessary for the credibility and accountability of trading programs.

Again, thank you for your letter. Should you need additional information or have further questions, please contact me or your staff may call Tom Dickerson, Office of Congressional and Intergovernmental Relations, at (202) 564-3638.

Sincerely,

Marianne L. Horinko

Marianne Lamont Horinko
Acting Administrator

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