

103D CONGRESS  
1ST SESSION

# S. 656

To provide for indoor air pollution abatement, including indoor radon abatement, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

MARCH 25 (legislative day, MARCH 3), 1993

Mr. MITCHELL (for himself, Mr. CHAFEE, Mr. LAUTENBERG, and Mr. LIEBERMAN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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## A BILL

To provide for indoor air pollution abatement, including indoor radon abatement, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the  
5 “Indoor Air Quality Act of 1993”.

6 (b) TABLE OF CONTENTS.—The table of contents of  
7 this Act is as follows:

- Sec. 1. Short title and table of contents.
- Sec. 2. Findings.
- Sec. 3. Purposes.
- Sec. 4. Definitions.
- Sec. 5. Indoor air quality research.
- Sec. 6. Management practices and ventilation standards.

- Sec. 7. Indoor air contaminant health advisories.
- Sec. 8. National indoor air quality response plan.
- Sec. 9. Federal building response plan and demonstration program.
- Sec. 10. State and local indoor air quality programs.
- Sec. 11. Office of Indoor Air Quality.
- Sec. 12. Council on Indoor Air Quality.
- Sec. 13. Indoor air quality information clearinghouse.
- Sec. 14. Building assessment demonstration.
- Sec. 15. State and Federal authority.
- Sec. 16. Authorization of appropriations.

1 **SEC. 2. FINDINGS.**

2 The Congress finds that—

3 (1) Americans spend up to 90 per centum of a  
4 day indoors and, as a result, have a significant po-  
5 tential for exposure to contaminants in the air in-  
6 doors;

7 (2) exposure to indoor air contamination occurs  
8 in workplaces, schools, public buildings, residences,  
9 and transportation vehicles;

10 (3) recent scientific studies indicate that pollut-  
11 ants in the indoor air include radon, asbestos, vola-  
12 tile organic chemicals (including, formaldehyde and  
13 benzene), combustion byproducts (including, carbon  
14 monoxide and nitrogen oxides), metals and gases  
15 (including, lead, chlorine, and ozone), respirable par-  
16 ticles, biological contaminants, microorganisms, and  
17 other contaminants;

18 (4) a number of contaminants found in both  
19 ambient air and indoor air may occur at higher con-  
20 centrations in indoor air than in outdoor air;

1           (5) indoor air pollutants pose serious threats to  
2 public health (including cancer, respiratory illness,  
3 multiple chemical sensitivities, skin and eye irrita-  
4 tion, and related effects);

5           (6) up to 15 per centum of the United States  
6 population may have heightened sensitivity to chemi-  
7 cals and related substances found in the air indoors;

8           (7) radon is among the most harmful indoor air  
9 pollutants and is estimated to cause between five  
10 thousand and twenty thousand lung cancer deaths  
11 each year;

12           (8) other selected indoor air pollutants are esti-  
13 mated to cause between three thousand five hundred  
14 and six thousand five hundred additional cancer  
15 cases per year;

16           (9) indoor air contamination is estimated to  
17 cause significant increases in medical costs and de-  
18 clines in work productivity;

19           (10) as many as 20 per centum of office work-  
20 ers may be exposed to environmental conditions  
21 manifested as “sick building syndrome”;

22           (11) sources of indoor air pollution include con-  
23 ventional ambient air pollution sources, building ma-  
24 terials, consumer and commercial products, combus-

1       tion appliances, indoor application of pesticides and  
2       other sources;

3           (12) there is not an adequate effort by Federal  
4       agencies to conduct research on the seriousness and  
5       extent of indoor air contamination, to identify the  
6       health effects of indoor air contamination, and to de-  
7       velop control technologies, education programs, and  
8       other methods of reducing human exposure to such  
9       contamination;

10          (13) there is not an adequate effort by Federal  
11       agencies to develop response plans to reduce human  
12       exposure to indoor air contaminants and there is a  
13       need for improved coordination of the activities of  
14       these agencies;

15          (14) there is not an adequate effort by Federal  
16       agencies to develop methods, techniques, and proto-  
17       cols for assessment of indoor air contamination in  
18       non-residential, non-industrial buildings and to pro-  
19       vide guidance on measures to respond to contamina-  
20       tion; and

21          (15) State governments can make significant  
22       contributions to the effective reduction of human ex-  
23       posure to indoor air contaminants and the Federal  
24       Government should assist States in development of  
25       programs to reduce exposures to these contaminants.

1 **SEC. 3. PURPOSE.**

2 The purposes of this title are to—

3 (1) develop and coordinate through the Envi-  
4 ronmental Protection Agency and at other depart-  
5 ments and agencies of the United States a com-  
6 prehensive program of research and development  
7 concerning the seriousness and extent of indoor air  
8 contamination, the human health effects of indoor  
9 air contaminants, and the technological and other  
10 methods of reducing human exposure to such con-  
11 taminants;

12 (2) establish a process whereby the existing au-  
13 thorities of Federal statutes will be directed and fo-  
14 cused to assure the full and effective application of  
15 these authorities to reduce human exposure to in-  
16 door air contaminants where appropriate;

17 (3) provide support to State governments to  
18 demonstrate and develop indoor air quality manage-  
19 ment strategies, assessments, and response pro-  
20 grams; and

21 (4) to authorize activities to assure the general  
22 coordination of indoor air quality-related activity, to  
23 provide for reports on indoor air quality to Congress,  
24 to provide for assessments of indoor air contamina-  
25 tion in specific buildings by the National Institute  
26 for Occupational Safety and Health, to assure that

1 data and information on indoor air quality issues is  
2 available to interested parties, to provide training,  
3 education, information, and technical assistance to  
4 the public and private sector, and for other pur-  
5 poses.

6 **SEC. 4. DEFINITIONS.**

7 For the purposes of this title, the term—

8 (1) “Agency” means the United States Envi-  
9 ronmental Protection Agency;

10 (2) “indoor” refers to the enclosed portions of  
11 buildings including non-industrial workplaces, public  
12 buildings, Federal buildings, school, commercial  
13 buildings, residences, and the occupied portions of  
14 vehicles;

15 (3) “indoor air contaminant” means any solid,  
16 liquid, semisolid, dissolved solid, biological organism,  
17 aerosol, or gaseous material, including combinations  
18 or mixtures of substances in indoor air which may  
19 reasonably be anticipated to have an adverse effect  
20 on human health;

21 (4) “Federal agency” or “agency of the United  
22 States” means any department, agency or other in-  
23 strumentality of the Federal Government, including  
24 any independent agency or establishment of the Fed-  
25 eral Government or government corporation;

1           (5) “Federal building” means any building  
2           which is used primarily as an office building, school,  
3           hospital, or residence that is owned, leased, or oper-  
4           ated by any Federal agency and is over ten thousand  
5           square feet in area, any building occupied by the Li-  
6           brary of Congress, the White House and the Vice  
7           Presidential residence, and any building that is in-  
8           cluded in the definition of Capitol Buildings under  
9           section 193m(1) of title 40, United States Code;

10           (6) “Administrator” means the Administrator  
11           of the Environmental Protection Agency;

12           (7) “Administration” means the Occupational  
13           Safety and Health Administration;

14           (8) “Director” means the Director of the Na-  
15           tional Institute of Occupational Safety and Health;

16           (9) “local education agency” means any edu-  
17           cational agency as defined in section 198 of the Ele-  
18           mentary and Secondary Education Act of 1965 (20  
19           U.S.C. 3381); and

20           (10) “local air pollution control agency” means  
21           any city, county, or other local government authority  
22           charged with the responsibility for implementing  
23           programs or enforcing ordinances or laws relating to  
24           the prevention and control of air pollution including  
25           indoor air pollution.

1 **SEC. 5. INDOOR AIR QUALITY RESEARCH.**

2 (a) AUTHORITY.—(1) The Administrator shall, in co-  
3 ordination with other appropriate Federal agencies, estab-  
4 lish a national research, development, and demonstration  
5 program to assure the quality of air indoors and as part  
6 of such program shall promote the coordination and accel-  
7 eration of research, investigations, experiments, dem-  
8 onstrations, surveys, and studies relating to the causes,  
9 sources, effects, extent, prevention, detection, and correc-  
10 tion of contamination of indoor air.

11 (2) In carrying out the provisions of this section, the  
12 Administrator is authorized, subject to the availability of  
13 appropriations, to—

14 (A) collect and make available to the public  
15 through publications and other appropriate means,  
16 the results of research, development and demonstra-  
17 tion activities conducted pursuant to this section;

18 (B) conduct research, development and dem-  
19 onstration activities and cooperate with other Fed-  
20 eral agencies, with State and local government enti-  
21 ties, interstate and regional agencies, other public  
22 agencies and authorities, nonprofit institutions and  
23 organizations and other persons in the preparation  
24 and conduct of such research, development and dem-  
25 onstration activities;

1 (C) make grants to the States or to local gov-  
2 ernment entities, to other public agencies and au-  
3 thorities, to nonprofit institutions and organizations,  
4 and to other persons;

5 (D) enter into contracts or cooperative agree-  
6 ments with public agencies and authorities, non-  
7 profit institutions and organizations, and other per-  
8 sons;

9 (E) conduct studies, including epidemiological  
10 studies, of the effects of indoor air contaminants or  
11 potential contaminants on mortality and morbidity  
12 and clinical and laboratory studies on the  
13 immunologic, biochemical, physiological, and toxi-  
14 cological effects including the carcinogenic,  
15 teratogenic, mutagenic, cardiovascular, and neuro-  
16 toxic effects of indoor air contaminants or potential  
17 contaminants;

18 (F) develop and disseminate information docu-  
19 ments on indoor air contaminants describing the na-  
20 ture and characteristics of such contaminants in var-  
21 ious concentrations;

22 (G) develop effective and practical processes,  
23 protocols, methods, and techniques for the preven-  
24 tion, detection, and correction of indoor air contami-  
25 nation and work with the private sector, other gov-

1       ernmental entities, and schools and universities to  
2       encourage the development of innovative techniques  
3       to improve indoor air quality;

4               (H) construct such facilities and staff and equip  
5       them as may be necessary to carry out the provi-  
6       sions of this section;

7               (I) call conferences concerning the potential or  
8       actual contamination of indoor air giving oppor-  
9       tunity for interested persons to be heard and present  
10       papers at such conferences;

11              (J) utilize, on a reimbursable basis, facilities  
12       and personnel of existing Federal scientific labora-  
13       tories and research centers;

14              (K) acquire secret processes, technical data, in-  
15       ventions, patent applications, patents, licenses, and  
16       an interest in lands, plants, equipment and facilities  
17       and other property rights, by purchase, license,  
18       lease, or donation. If the Administrator expects or  
19       intends that research pursuant to this subsection  
20       will primarily affect worker safety and health, he  
21       shall consult with the Assistant Secretary of Occupa-  
22       tional Safety and Health and the Director; and

23              (L) conduct research, development and dem-  
24       onstration activities with nonprofit institutions on

1 the use of indoor foliage as a method to reduce in-  
2 door air pollution.

3 (b) PROGRAM REQUIREMENTS.—The Administrator,  
4 in coordination with other appropriate Federal agencies,  
5 shall conduct, assist, or facilitate research, investigations,  
6 studies, surveys, or demonstrations with respect to, but  
7 not limited to, the following—

8 (1) the effects on human health of contami-  
9 nants or combinations of contaminants at various  
10 levels whether natural or anthropogenic including  
11 additive, cumulative, and synergistic effects on popu-  
12 lations both with and without heightened sensitivity  
13 that are found or are likely to be found in indoor  
14 air;

15 (2) the exposure of persons to contaminants  
16 that are found in indoor air (including exposure to  
17 such substances from sources other than indoor air  
18 contamination including drinking water, diet, or  
19 other exposures);

20 (3) the identification of populations at in-  
21 creased risk of illness from exposure to indoor air  
22 contaminants and assessment of the extent and  
23 characteristics of such exposure;

24 (4) the exposure of persons to contaminants in  
25 different building classes or types, and in vehicles,

1 and assessment of the association of particular con-  
2 taminants and particular building classes or types  
3 and vehicles;

4 (5) identification of building classes or types  
5 and design features or characteristics which increase  
6 the likelihood of exposure to indoor air contami-  
7 nants;

8 (6) identification of the sources of indoor air  
9 contaminants including association of contaminants  
10 with outdoor sources, building or vehicle design,  
11 classes or types of products, building management  
12 practices, equipment operation practices, building  
13 materials, and related factors;

14 (7) assessment of relationships between con-  
15 taminant concentration levels in ambient air and the  
16 contaminant concentration levels in the indoor air;

17 (8) development of methods and techniques for  
18 characterizing and modeling indoor air movement  
19 and flow within buildings or vehicles, including the  
20 transport and dispersion of contaminants in the in-  
21 door air;

22 (9) assessment of the fate, including degrada-  
23 tion and transformation, or particular contaminants  
24 in indoor air;

1           (10) development of methods and techniques to  
2 characterize the association of contaminants, the lev-  
3 els of contaminants, and the potential for contami-  
4 nation of new construction with climate, building lo-  
5 cation, seasonal change, soil and geologic formations,  
6 and related factors;

7           (11) assessment of indoor air quality in facili-  
8 ties of local education agencies and buildings hous-  
9 ing child care facilities and development of measures  
10 and techniques for control of indoor air contamina-  
11 tion in such buildings;

12           (12) development of protocols, methods, tech-  
13 niques and instruments for sampling indoor air to  
14 determine the presence and level of contaminants in-  
15 cluding sample collection and the storage of samples  
16 before analysis and development of methods to im-  
17 prove the efficiency and reduce the cost of analysis;

18           (13) development of air quality sampling meth-  
19 ods and instruments which are inexpensive and easy  
20 to use and may be used by the general public;

21           (14) development of control technologies, build-  
22 ing design criteria, and management practices to  
23 prevent the entrance of contaminants into buildings  
24 or vehicles (for example, air intake protection, seal-  
25 ing, and related measures) and to reduce the con-

1 concentrations of contaminants indoor (for example,  
2 control of emissions from internal sources of con-  
3 tamination, improved air exchange and ventilation,  
4 filtration, and related measures);

5 (15) development of materials and products  
6 which may be used as alternatives to materials or  
7 products which are now in use and which contribute  
8 to indoor air contamination;

9 (16) development of equipment and processes  
10 for removal of contaminants from the indoor air;

11 (17) research, to be carried out principally by  
12 the Occupational Safety and Health Administration  
13 and the National Institute for Occupational Safety  
14 and Health, for the purpose of assessing—

15 (A) the exposure of workers to indoor air  
16 contaminants including assessment of resulting  
17 health effects; and

18 (B) the costs of declines in productivity,  
19 sick time use, increased use of employer-paid  
20 health insurance, and worker compensation  
21 claims;

22 (18) research, to be carried out in conjunction  
23 with the Secretary of Housing and Urban Develop-  
24 ment, and the Secretary of the Department of En-  
25 ergy for the purpose of developing—

1 (A) methods for assessing the potential for  
2 radon contamination of new construction, in-  
3 cluding (but not limited to) consideration of the  
4 moisture content of soil, permeability of soil,  
5 and radon content of soil; and

6 (B) design measures to avoid indoor air  
7 pollution, and

8 (19) research, to be carried out in conjunction  
9 with the Secretary of Transportation, for the pur-  
10 poses of—

11 (A) assessing the potential for indoor air  
12 contamination in public and private transpor-  
13 tation; and

14 (B) designing measures to avoid such in-  
15 door air contamination.

16 (20) research, to be carried out in consultation  
17 with the Administrator for the National Aeronautics  
18 and Space Administration, for the purpose of assess-  
19 ing the use of indoor foliage as a means to reduce  
20 indoor air contamination, including demonstration  
21 projects to determine the level of pollutants reduced  
22 by indoor plants in buildings.

23 (c) TECHNOLOGY DEMONSTRATION PROGRAM.—(1)  
24 The Administrator may enter into cooperative agreements  
25 or contracts, or provide financial assistance in the form

1 of grants, to public agencies and authorities, nonprofit in-  
2 stitutions and organizations, employee advocate organiza-  
3 tions, local educational institutions, or other persons, to  
4 demonstrate practices, methods, technologies, or processes  
5 which may be effective in controlling sources or potential  
6 sources of indoor air contamination, preventing the occur-  
7 rence of indoor air contamination, and reducing exposures  
8 to indoor air contamination.

9 (2) The Administrator may assist demonstration ac-  
10 tivities under paragraph (1) of this subsection only if—

11 (A) such demonstration activity will serve to  
12 demonstrate a new or significantly improved prac-  
13 tice, method, technology or process or the feasibility  
14 and cost effectiveness of an existing, but unproven,  
15 practice, method, technology, or process and will not  
16 duplicate other Federal, State, local, or commercial  
17 efforts to demonstrate such practice, method, tech-  
18 nology, or process;

19 (B) such demonstration activity meets the re-  
20 quirements of this section and serves the purposes of  
21 this Act;

22 (C) the demonstration of such practice, tech-  
23 nology, or process will comply with all other laws  
24 and regulations for the protection of human health,  
25 welfare, and the environment; and

1 (D) in the case of a contract or cooperative  
2 agreement, such practice, method, technology, or  
3 process would not be adequately demonstrated by  
4 State, local, or private persons or in the case of an  
5 application for financial assistance by a grant, such  
6 practice, method, technology, or process is not likely  
7 to receive adequate financial assistance from other  
8 sources.

9 (3) The demonstration program established by this  
10 subsection shall include solicitations for demonstration  
11 projects, selection of suitable demonstration projects from  
12 among those proposed, supervision of such demonstration  
13 projects, evaluation and publication of the results of dem-  
14 onstration projects, and dissemination of information on  
15 the effectiveness and feasibility of the practices, methods,  
16 technologies and processes which are proven to be effec-  
17 tive.

18 (4) Within one hundred and eighty days after the  
19 date of enactment of this title, and no less often than every  
20 twelve months thereafter, the Administrator shall publish  
21 a solicitation for proposals to demonstrate, prototype or  
22 at full-scale, practices, methods, technologies, and proc-  
23 esses which are (or may be) effective in controlling sources  
24 or potential sources of indoor air contaminants. The solici-  
25 tation notice shall prescribe the information to be included

1 in the proposal, including technical and economic informa-  
2 tion derived from the applicant's own research and devel-  
3 opment efforts, and other information sufficient to permit  
4 the Administrator to assess the potential effectiveness and  
5 feasibility of the practice, method, technology, or process  
6 proposed to be demonstrated.

7 (5) Any person and any public or private nonprofit  
8 entity may submit an application to the Administrator in  
9 response to the solicitations required by paragraph (4) of  
10 this subsection. The application shall contain a proposed  
11 demonstration plan setting forth how and when the project  
12 is to be carried out and such other information as the Ad-  
13 ministrator may require.

14 (6) In selecting practices, methods, technologies or  
15 processes to be demonstrated, the Administrator shall  
16 fully review the applications submitted and shall evaluate  
17 each project according to the following criteria—

18 (A) the potential for the proposed practice,  
19 method, technology, or process to effectively control  
20 sources or potential sources of contaminants which  
21 present risks to human health;

22 (B) the consistency of the proposal with the  
23 recommendations provided pursuant to paragraph  
24 (8) of section 8(d);

1 (C) the capability of the person or persons pro-  
2 posing the project to successfully complete the dem-  
3 onstration as described in the application;

4 (D) the likelihood that the demonstrated prac-  
5 tice, method, technique, or process could be applied  
6 in other locations and circumstances to control  
7 sources or potential sources of contaminants, includ-  
8 ing considerations of cost, effectiveness, and techno-  
9 logical feasibility;

10 (E) the extent of financial support from other  
11 persons to accomplish the demonstration as de-  
12 scribed in the application; and

13 (F) the capability of the person or persons pro-  
14 posing the project to disseminate the results of the  
15 demonstration or otherwise make the benefits of the  
16 practice, method, or technology widely available to  
17 the public in a timely manner.

18 (7) The Administrator shall select or refuse to select  
19 a project for demonstration under this subsection in an  
20 expeditious manner. In the case of a refusal to select a  
21 project, the Administrator shall notify the applicant of the  
22 reasons for the refusal.

23 (8) Each demonstration project under this section  
24 shall be performed by the applicant, or by a person satis-  
25 factory to the applicant, under the supervision of the Ad-

1 administrator. The Administrator shall enter into a written  
2 agreement with each applicant granting the Administrator  
3 the responsibility and authority for testing procedures,  
4 quality control, monitoring, and other measurements nec-  
5 essary to determine and evaluate the results of the dem-  
6 onstration project.

7 (9) The Administrator shall enter into agreements,  
8 wherever practicable and desirable, to provide for monitor-  
9 ing testing procedures, quality control, and such other  
10 measurements necessary to evaluate the results of dem-  
11 onstration projects or facilities intended to control sources  
12 or potential sources of contaminants.

13 (10) Each demonstration project under this section  
14 shall be completed within such time as is established in  
15 the demonstration plan. The Administrator may extend  
16 any deadline established under this subsection by mutual  
17 agreement with the applicant concerned.

18 (11) Total Federal funds for any demonstration  
19 project under this section shall not exceed 75 per centum  
20 of the total cost of such project. In cases where the Admin-  
21 istrator determines that research under this section is of  
22 a basic nature which would not otherwise be undertaken,  
23 or the applicant is a local educational agency, the Admin-  
24 istrator may approve grants under this section with a

1 matching requirement other than that specified in this  
2 subsection, including full Federal funding.

3 (12) The Administrator shall, from time to time, pub-  
4 lish general reports describing the findings of demonstra-  
5 tion projects conducted pursuant to this section. Such re-  
6 ports shall be provided to the Indoor Air Quality Informa-  
7 tion Clearinghouse provided for in section 13 of this Act.

8 (d) ASSESSMENT OF SCHOOLS AND CHILD CARE FA-  
9 CILITIES.—(1) The Administrator shall conduct a national  
10 assessment of the seriousness and extent of indoor air con-  
11 tamination in buildings owned by local educational agen-  
12 cies and child care facilities.

13 (2) The Administrator shall establish an advisory  
14 group made up of representatives of school administrators,  
15 teachers, child care organizations, parents and service em-  
16 ployees and other interested parties, including scientific  
17 and technical experts familiar with indoor air pollution ex-  
18 posures, effects, and controls, to provide guidance and di-  
19 rection in the development of the national assessment.

20 (3) The Administrator shall provide a report to Con-  
21 gress of the results of the national assessment not later  
22 than two years after the date of enactment of this Act.  
23 The report required by this paragraph shall provide such  
24 recommendations for activities or programs to reduce and  
25 avoid indoor air contamination in buildings owned by local

1 educational agencies and in child care facilities as the Ad-  
2 ministrator determines to be appropriate.

3 (e) REPORTS TO CONGRESS.—(1) The Administrator  
4 shall, within twenty-four months of the date of enactment  
5 of this Act, prepare and submit to the Congress a report  
6 reviewing and assessing issues related to chemical sensitiv-  
7 ity disorders, including multiple chemical sensitivities. The  
8 Advisory Committee established pursuant to section 7(c)  
9 of this title shall review and comment on the report prior  
10 to submittal to the Congress.

11 (2) The Administrator, in consultation with the Ad-  
12 ministrator for the National Aeronautics and Space Ad-  
13 ministration, shall submit to the Congress a report on the  
14 research program authorized under paragraph (20) of  
15 subsection (b) within 2 years of enactment of this Act.

16 (f) CLARIFICATION OF AUTHORITY.—Title IV of the  
17 Superfund Amendments and Reauthorization Act of 1986  
18 (42 U.S.C. 7401 note) is repealed.

19 **SEC. 6. MANAGEMENT PRACTICES AND VENTILATION**  
20 **STANDARDS.**

21 SEC. 6. (a) TECHNOLOGY AND MANAGEMENT PRAC-  
22 TICE ASSESSMENT BULLETINS.—(1) The Administrator  
23 shall publish bulletins providing an assessment of tech-  
24 nologies and management practices for the control and  
25 measurement of contaminants in the air indoors.

1 (2) Bulletins published pursuant to this subsection  
2 shall, at a minimum—

3 (A) describe the control or measurement tech-  
4 nology or practice;

5 (B) describe the effectiveness of the technology  
6 or practice in control or measurement of indoor air  
7 contaminants and, to the extent feasible, the result-  
8 ing reduction in risk to human health;

9 (C) assess the feasibility of application of the  
10 technology or practice in buildings of different types,  
11 sizes, ages, and designs;

12 (D) assess the cost of application of the tech-  
13 nology or practice in buildings of different types,  
14 sizes, ages, and designs, including capital and oper-  
15 ational costs; and

16 (E) assess any risks to human health that such  
17 technology or practice may create.

18 (3) The Administrator shall establish and utilize a  
19 standard format for presentation of the technology and  
20 management practice assessment bulletins. The format  
21 shall be designed to facilitate assessment of technologies  
22 or practices by interested parties, including homeowners  
23 and building owners and managers.

24 (4) The Administrator shall provide that bulletins  
25 published pursuant to this subsection shall be published

1 on a schedule consistent with the publication of health  
2 advisories pursuant to section 7(b) of this Act to the ex-  
3 tent practicable.

4 (5) In development of bulletins pursuant to this sub-  
5 section, the Administrator shall provide for public review  
6 and shall consider public comment prior to publication of  
7 bulletins. Where the technology or management practice  
8 is expected to have significant implications for worker  
9 safety or health, the Administrator shall consult with the  
10 Director prior to seeking review and comment.

11 (6) Bulletins published pursuant to this subsection  
12 shall be provided to the Indoor Air Quality Information  
13 Clearinghouse provided for in section 13 of this Act and,  
14 to the extent practicable, shall be made available to archi-  
15 tecture, design, and engineering firms and building owners  
16 and managers and to organizations representing such par-  
17 ties.

18 (b) MODEL BUILDING MANAGEMENT PRACTICES  
19 TRAINING.—(1) Within twelve months of the date of en-  
20 actment of this Act, the Director of the National Institute  
21 of Occupational Safety and Health, in consultation with  
22 the Administrator of the General Services Administration  
23 and the Administrator, shall develop an indoor air training  
24 course providing training in—

1 (A) principles, methods, and techniques related  
2 to ventilation system operation and maintenance in-  
3 cluding applicable ventilation guidelines and stand-  
4 ards;

5 (B) maintenance of records concerning indoor  
6 air quality, including maintenance of ventilation sys-  
7 tems, complaints of indoor air quality, and actions  
8 taken to address indoor air quality problems;

9 (C) health threats posed by indoor air pollut-  
10 ants, including a knowledge of health advisories pub-  
11 lished pursuant to this title and other information  
12 concerning contaminant levels;

13 (D) identification of potential indoor air pollut-  
14 ant sources and options for reducing exposures to  
15 contaminants;

16 (E) special measures which may be necessary to  
17 reduce indoor air contaminant exposures in new  
18 buildings and in portions of buildings which have  
19 been renovated or substantially refurbished within  
20 the past six months; and

21 (F) special measures which may be necessary to  
22 reduce exposures to contaminants associated with  
23 pesticide applications, installation of products, fur-  
24 nishings, or equipment, and cleaning operations.

1           (2) Within twenty-four months of the date of enact-  
2 ment of this Act, the Director of the National Institute  
3 for Occupational Safety and Health shall provide, or con-  
4 tract for the provision of, training courses pursuant to  
5 paragraph (1) of this subsection sufficient, at a minimum,  
6 to assure training on a schedule consistent with the re-  
7 quirements of section 9(f)(2).

8           (3) The Director of the National Institute of Occupa-  
9 tional Safety and Health, or firms or organizations operat-  
10 ing under contract with such Administrator, are author-  
11 ized to establish a fee for training pursuant to this sub-  
12 section. Fees shall be in an amount not to exceed the  
13 amount necessary to defray the costs of the training pro-  
14 gram.

15           (4) The Director of the National Institute of Occupa-  
16 tional Safety and Health, in consultation with the Admin-  
17 istrator of the General Services Administration, and the  
18 Administrator, shall prepare a report to Congress within  
19 forty-eight months of the date of enactment of this sub-  
20 section assessing the training program pursuant to this  
21 subsection and making recommendations concerning the  
22 application of training requirements to classes and types  
23 of buildings not covered by this subsection.

24           (c) VENTILATION PROGRAM.—(1) The Adminis-  
25 trator, in coordination with other Federal agencies, shall

1 conduct a program to analyze the adequacy of existing  
2 ventilation standards and guidelines to protect the public  
3 and workers from indoor air contaminants.

4 (2) The Administrator shall—

5 (A) identify and describe ventilation standards  
6 adopted by State and local governments and profes-  
7 sional organizations, including the American Society  
8 of Heating, Refrigerating and Air Conditioning En-  
9 gineers;

10 (B) determine the adequacy of the standards  
11 for protecting public health and promoting worker  
12 productivity;

13 (C) assess the costs of compliance with such  
14 standards;

15 (D) determine the degree to which such stand-  
16 ards are being adopted and enforced;

17 (E) identify the extent to which buildings are  
18 being operated in a manner which achieves the  
19 standards; and

20 (F) assess the potential for such standards to  
21 complement controls over specific sources of con-  
22 taminants in reducing indoor air contamination.

23 (3) The Administrator shall submit to the Congress,  
24 within thirty-six months of the enactment of this Act a  
25 report which shall—

1 (A) describe the ventilation program carried out  
2 under this Act; and

3 (B) make recommendations concerning—

4 (i) the establishment of ventilation stand-  
5 ards which protect public and worker health  
6 and take comfort and energy conservation goals  
7 into account; and

8 (ii) ensuring that adequate ventilation  
9 standards are being adopted and that buildings  
10 are being operated in a manner which achieves  
11 the standards.

12 **SEC. 7. INDOOR AIR CONTAMINANT HEALTH ADVISORIES.**

13 (a) LIST OF CONTAMINANTS.—(1) Within two hun-  
14 dred and forty days after the date of enactment of this  
15 Act, the Administrator shall prepare and publish in the  
16 Federal Register a list of the contaminants (hereinafter  
17 referred to as listed contaminants) that may occur or are  
18 known to occur in indoor air at levels which may reason-  
19 ably be expected to have an adverse impact on human  
20 health. The list may include combinations or mixtures of  
21 contaminants and may refer to such combinations or mix-  
22 tures by a common name.

23 (2) The Administrator shall from time to time and  
24 as necessary to carry out the provisions of this Act, but  
25 not less often than biennially, review and revise such list

1 adding other contaminants pursuant to the requirements  
2 of this Act.

3 (3) The list provided for in paragraph (1) of this sub-  
4 section shall include, at a minimum: benzene, biological  
5 contaminants, carbon monoxide, formaldehyde, lead,  
6 methylene chloride, nitrogen oxide, particulate matter, as-  
7 bestos, polycyclic aromatic hydrocarbons, (PAHs), and  
8 radon.

9 (4) In development of the list provided for in para-  
10 graph (1) of this subsection or in revision of such list pur-  
11 suant to paragraph (2), the Administrator shall consult  
12 with the advisory panel provided for in subsection (c) of  
13 this section and provide for public review and shall con-  
14 sider public comment prior to issuance of a final list.

15 (5) The listing of contaminants under this subsection  
16 is not an agency rulemaking. In considering objections  
17 raised in any judicial or related action, the Administra-  
18 tor's decision to list a particular contaminant shall be  
19 upheld unless the objecting party can demonstrate that  
20 the decision was arbitrary or capricious or otherwise not  
21 in accordance with the law. The list of contaminants pre-  
22 pared in accordance with this subsection shall not be con-  
23 strued to indicate that those contaminants not listed are  
24 safe for human exposure or without adverse health effect.

1           (6) Upon application of the Governor of a State show-  
2 ing that a contaminant or potential contaminant in the  
3 indoor air which is not listed pursuant to paragraph (1)  
4 of this subsection may reasonably be anticipated to have  
5 an adverse effect on human health as a result of its pres-  
6 ence in the indoor air, the Administrator shall, within  
7 ninety days, revise the list established by paragraph (1)  
8 of this subsection to include such contaminant or publish  
9 in the Federal Register the reasons for not making such  
10 a revision.

11           (b) CONTAMINANT HEALTH ADVISORIES.—(1) The  
12 Administrator shall, in consultation with the advisory  
13 panel, provided for in subsection (c) of this section, and  
14 after providing for public review and comment pursuant  
15 to paragraph (6), publish advisory materials addressing  
16 the adverse human health effects of listed contaminants.

17           (2) Such advisory materials shall, at a minimum, de-  
18 scribe—

19                   (A) the physical, chemical, biological, and radio-  
20                   logical properties of the contaminant;

21                   (B) the adverse human health effects of the  
22                   contaminant in various indoor environments and in  
23                   various concentrations;

24                   (C) and analysis of the risk posed by the con-  
25                   taminant to human health at the full range of con-

1       centration levels, including risk to subpopulations  
2       which may be especially sensitive to exposure to the  
3       contaminant;

4               (D) the extent to which the contaminant, or a  
5       mixture of contaminants, is associated with a par-  
6       ticular substance of material and emissions rates  
7       which are expected to result in varying levels of con-  
8       taminant concentration in indoor air;

9               (E) any Technology and Management Practice  
10      Assessment Bulletin which is applicable to the con-  
11      taminant and any actions which are identified for  
12      the contaminant in the National Indoor Air Quality  
13      Response Plan prepared pursuant to this Act; and

14              (F) any indoor air contaminant standards or  
15      related action levels which are in effect under any  
16      authority of a Federal statute or regulation, the au-  
17      thority of State statutes or regulations, the authority  
18      of any local government, or the authority of another  
19      country, including standards or action levels sug-  
20      gested by appropriate international organizations.

21              (2) Health advisories published pursuant to his sec-  
22      tion shall in no way limit or restrict the application of  
23      requirements or standards established under any other  
24      Federal statute.

1           (3) The Administrator shall establish and utilize a  
2 standard format of presentation of indoor air contaminant  
3 health advisories. The format shall be designed to facili-  
4 tate public understanding of the range of risks of exposure  
5 to indoor air contaminants and shall include a summary  
6 of the research and information concerning the contami-  
7 nant which is understandable to public health profes-  
8 sionals and to those who lack training in toxicology.

9           (4) The Administrator shall publish health advisories  
10 for listed contaminants as expeditiously as possible. At a  
11 minimum, the Administrator shall publish not less than  
12 six advisories within eighteen months of the date of enact-  
13 ment of this Act and shall publish an additional six  
14 advisories within thirty-six months of the date of enact-  
15 ment of this Act

16           (5) Health advisories shall be based on the most cur-  
17 rent available scientific and related findings or informa-  
18 tion and shall be reviewed, revised, and republished to re-  
19 flect new scientific and related findings or information on  
20 a periodic basis but not less frequently than every five  
21 years.

22           (6) In development and revision of health advisories  
23 pursuant to this subsection, the Administrator shall pro-  
24 vide for public review and comment, including provision  
25 of notice in the Federal Register of the intent to publish

1 a health advisory not less than ninety days prior to publi-  
2 cation, and shall consider public comment prior to issu-  
3 ance of an advisory.

4 (c) ADVISORY PANEL.—The Indoor Air Quality and  
5 Total Human Exposure Committee of the Environmental  
6 Protection Agency Science Advisory Board shall advise the  
7 Administrator with respect to the implementation of this  
8 section including, but not limited to, the listing of con-  
9 taminants, the contaminants for which advisories should  
10 be published, the order in which advisories should be pub-  
11 lished, the content, quality, and format of advisory docu-  
12 ments, and the revision of such documents. The Adminis-  
13 trator shall provide that a representative of the Agency  
14 for Toxic Substances and Disease Registry, the Depart-  
15 ment of Energy Office of Health and Environmental Re-  
16 search, the National Institute for Occupational Safety and  
17 Health, and the National Institute for Environmental  
18 Health Sciences shall participate in the work of the Advi-  
19 sory Panel as ex officio members.

20 **SEC. 8. NATIONAL INDOOR AIR QUALITY RESPONSE PLAN.**

21 (a) AUTHORITY.—(1) The Administrator shall, in co-  
22 ordination with other appropriate Federal agencies, de-  
23 velop and publish a national indoor air quality response  
24 plan.

1           (2) The response plan shall provide for implementa-  
2 tion of a range of response actions identified in sub-  
3 sections (b) and (c) which will result in the reduction of  
4 human exposure to indoor air contaminants listed pursu-  
5 ant to section 7(a) of this Act and attainment, to the full-  
6 est extent practicable, of indoor air contaminant levels  
7 which are protective of human health.

8           (b) EXISTING AUTHORITY.—The Administrator, in  
9 coordination with other appropriate Federal agencies,  
10 shall include in the plans provided for in subsection (a)  
11 of this section a description of specific response actions  
12 to be implemented based on existing statutory authorities  
13 provided in—

14                 (1) the Clean Air Act (42 U.S.C. 7401 et seq.);

15                 (2) the Toxic Substances Control Act (15  
16 U.S.C. 201 et seq.);

17                 (3) the Federal Insecticide, Fungicide, and  
18 Rodenticide Act (7 U.S.C. 136 et seq.);

19                 (4) the Safe Drinking Water Act (42 U.S.C.  
20 300 et seq.);

21                 (5) the authorities of the Consumer Product  
22 Safety Commission;

23                 (6) the authorities of the Occupational Safety  
24 and Health Administration and the National Insti-  
25 tute for Occupational Safety and Health; and

1           (7) other regulatory and related authorities pro-  
2           vided under any other Federal statute.

3 In implementation of response actions pursuant to para-  
4 graph (6) of this subsection the Assistant Secretary for  
5 Occupational Safety and Health shall consult with rep-  
6 resentatives of State and local governments and their em-  
7 ployees with respect to States where the Occupational  
8 Safety and Health Administration lacks jurisdiction over  
9 State and local employees.

10       (c) SUPPORTING ACTINGS.—The Administrator, in  
11 coordination with other appropriate Federal agencies,  
12 shall include in the plans provided for in subsection (a)  
13 of this section a description of specific supporting actions  
14 including, but not limited to—

15           (1) programs to disseminate technical informa-  
16           tion to public health, design, and construction pro-  
17           fessionals concerning the risks of exposure to indoor  
18           air contaminants and methods and programs for re-  
19           ducing exposures to such contaminants;

20           (2) development of guidance documents ad-  
21           dressing individual contaminants, groups of contami-  
22           nants, sources of contaminants, or types of buildings  
23           or structures and providing information on measures  
24           to reduce exposure to contaminants including—

25                   (A) the estimated cost of such measures;

1 (B) the technologic feasibility of such  
2 measures; and

3 (C) the effectiveness and efficiency of such  
4 measures.

5 (3) education programs for the general public  
6 concerning the health threats posed by indoor air  
7 contaminants and appropriate individual response  
8 actions;

9 (4) technical assistance including design and  
10 implementation of training seminars for State and  
11 local officials, private and professional firms, and  
12 labor organizations dealing with indoor air pollution  
13 and addressing topics such as monitoring, analysis,  
14 mitigation, building management practices, ventila-  
15 tion, health effects, public information and program  
16 design;

17 (5) development of model building codes, in-  
18 cluding ventilation rates, for various types of build-  
19 ings designed to reduce levels of indoor air contami-  
20 nants;

21 (6) identification of contaminants, or cir-  
22 cumstances of contamination for which immediate  
23 action to protect public and worker health is nec-  
24 essary and appropriate and a description of the ac-  
25 tions needed;

1           (7) identification of contaminants, or cir-  
2           cumstances of contamination, where regulatory or  
3           statutory authority is not adequate to address an  
4           identified contaminant or circumstance of contami-  
5           nation and recommendation of legislation to provide  
6           needed authority;

7           (8) identification of contaminants, or cir-  
8           cumstances of contamination, where continued re-  
9           duction of contamination requires development of  
10          technology or technological mechanisms; and

11          (9) identification of remedies to “sick building  
12          syndrome”, including proper design and mainte-  
13          nance of ventilation systems, building construction  
14          and remodeling practices, and safe practices for the  
15          application of pesticides, herbicides, and disinfect-  
16          ants, and a standardized protocol for investigating  
17          and solving indoor air quality problems in sick build-  
18          ings.

19          (d) CONTENTS OF PLAN.—In describing specific ac-  
20          tions to be taken under subsections (b) and (c) of this  
21          section, the Administrator, in coordination with other ap-  
22          propriate Federal agencies, shall—

23                (1) identify the health effects, and any contami-  
24                nant or contaminants thought to cause health effects  
25                to be addressed by a particular action and to the

1 fullest extent feasible, the relative contribution to in-  
2 door air contamination from all sources of contami-  
3 nation;

4 (2) identify the statutory basis for the action;

5 (3) identify the schedule and process for imple-  
6 mentation of the action;

7 (4) identify the Federal agency with jurisdiction  
8 for the specific action which will implement the ac-  
9 tion; and

10 (5) identify the financial resources needed to  
11 implement the specific action and the source of these  
12 resources.

13 (e) SCHEDULE.—Response plans provided for in sub-  
14 section (a) shall be submitted to Congress within twenty-  
15 four months of enactment of this title and biennially there-  
16 after.

17 (f) REVIEW.—(1) The Administrator shall provide for  
18 public review and comment on the response plan provided  
19 for in this section, including provision of notice in the Fed-  
20 eral Register for public review and comment not less than  
21 three months prior to submission to the Congress. The  
22 Administrator shall include in the response plan a sum-  
23 mary of public comments.

1 (2) The Administrator shall provide for the review  
2 and comment on the response plan by the Council on In-  
3 door Air Quality provided for under section 12 of this Act.

4 (g) ASSESSMENT OF MONITORING AND MITIGATION  
5 SERVICES.—The Administrator shall include in the first  
6 plan published pursuant to this section an assessment of  
7 indoor air monitoring and mitigation services provided by  
8 private firms and other organizations, including the range  
9 of such services, the reliability and accuracy of such serv-  
10 ices, and the relative costs of such services. The assess-  
11 ment required by this subsection shall include a review and  
12 analysis of options for oversight of indoor air monitoring  
13 and mitigation firms and organizations, including registra-  
14 tion, licensing, and certification of such firms and organi-  
15 zations and options for imposing a user fee on such firms  
16 and organizations.

17 **SEC. 9. FEDERAL BUILDING RESPONSE PLAN AND DEM-**  
18 **ONSTRATION PROGRAM.**

19 (a) AUTHORITY.—The Administrator and the Admin-  
20 istrator of the General Services Administration shall de-  
21 velop and implement a program to respond to and reduce  
22 indoor air contamination in Federal buildings and to dem-  
23 onstrate methods of reducing indoor air contamination in  
24 new Federal buildings.

1 (b) FEDERAL BUILDING RESPONSE PLAN.—(1) The  
2 Administrator of the General Services Administration, in  
3 consultation with the Administrator, the Assistant Sec-  
4 retary for Occupational Safety and Health Administra-  
5 tion, the Director, and affected Federal departments or  
6 agencies shall prepare response plans addressing indoor  
7 air quality in Federal buildings. The plans shall, to the  
8 fullest extent practicable, be developed in conjunction with  
9 response plans pursuant to section 8 of this Act.

10 (2) The response plan shall provide for implementa-  
11 tion of a range of response actions which will result in  
12 the reduction of human exposure to indoor air contami-  
13 nants listed pursuant to section 7(a) of this Act, and at-  
14 tainment, to the fullest extent practicable, of indoor air  
15 contaminant concentration levels which are protective of  
16 public and worker health.

17 (3) Federal building response plans provided for in  
18 paragraph (1) of this subsection shall include—

19 (A) a list of all Federal buildings;

20 (B) a description and schedule of general re-  
21 sponse actions including general building manage-  
22 ment practices, product purchase guidelines, air  
23 quality problem identification practices and methods,  
24 personnel training programs, and other actions to be  
25 implemented to reduce exposures to indoor air con-

1       taminants in those buildings listed in subparagraph  
2       (A);

3               (C) a list of individual Federal buildings listed  
4       in subparagraph (A) for which there is sufficient evi-  
5       dence of indoor air contamination or related em-  
6       ployee health effects to warrant assessment of the  
7       building pursuant to section 14 of this Act and a  
8       schedule for development and submittal of building  
9       assessment proposals pursuant to section 14(d) of  
10      this Act;

11              (D) a description and schedule of specific re-  
12      sponse actions to be implemented in each specific  
13      building identified in subparagraph (C) and assessed  
14      pursuant to section 14 of this Act;

15              (E) an identification of the Federal agency re-  
16      sponsible for funding and implementation of each re-  
17      sponse action identified in subparagraphs (B) and  
18      (D); and

19              (F) an identification of the estimated costs of  
20      each response action identified in subparagraphs (B)  
21      and (D) and the source of these resources.

22      (4) The response plan provided for in this subsection  
23      shall address each Federal building identified in para-  
24      graph (3)(a), except that specific buildings may be ex-

1 emptied from coverage under this subsection. Such build-  
2 ings may be exempted on the grounds of—

3 (A) national security;

4 (B) anticipated demolition or termination of  
5 Federal ownership within three years; and

6 (C) specialized use of a building which pre-  
7 cludes necessary actions to reduce indoor air con-  
8 tamination.

9 (5) The plan provided for in subsection (b) shall be  
10 submitted to Congress within twenty-four months of en-  
11 actment of this title and biennially thereafter.

12 (6) The Administrator of the General Services Ad-  
13 ministration shall provide for public review and comment  
14 on the response plan provided for in this section, including  
15 provision of notice in the Federal Register not less than  
16 three months prior to submission to the Congress.

17 (7) The response plan shall include a summary of  
18 public comments. The Council on Indoor Air Quality, pro-  
19 vided for under section 12 of this Act, shall review and  
20 comment on the plan.

21 (c) INDOOR AIR QUALITY RESERVE.—(1) The Ad-  
22 ministrator of the General Services Administration shall  
23 reserve 0.5 per centum of any funds used for construction  
24 of new Federal buildings for design and construction of

1 measures to reduce indoor air contaminant concentrations  
2 within such buildings.

3 (2) Measures which may be funded with the reserve  
4 provided for in this subsection may include, but are not  
5 limited to—

6 (A) development and implementation of general  
7 design principles intended to avoid or prevent con-  
8 tamination of indoor air;

9 (B) design and construction of improved ven-  
10 tilation techniques or equipment;

11 (C) development and implementation of product  
12 purchasing guidelines;

13 (D) design and construction of contaminant de-  
14 tection and response systems;

15 (E) development of building management guide-  
16 lines and practices; and

17 (F) training in building and systems operations  
18 for building management and maintenance person-  
19 nel.

20 (3) Upon completion of construction of each Federal  
21 building covered by this section, the Administrator of the  
22 General Services Administration shall file with the Admin-  
23 istrator, with the Clearinghouse established under section  
24 13 of this Act, and with the Council established under sec-  
25 tion 12 of this Act, a report describing the uses made of

1 the reserve provided for in this subsection. Such report  
2 shall be in sufficient detail to provide design and construc-  
3 tion professionals with models and general plans of various  
4 indoor air contaminant reduction measures adequate to  
5 assess the appropriateness of such measures for applica-  
6 tion in other buildings.

7 (4) The Administrator of the General Services Ad-  
8 ministration, with the concurrence of the Administrator,  
9 may exempt a planned Federal building from the require-  
10 ments of this subsection if he finds that such exemption  
11 is required on the grounds of national security or that the  
12 intended use of the building is not compatible with the  
13 authority of this section.

14 (d) NEW EPA BUILDINGS.—Any new building con-  
15 structed for use by the Environmental Protection Agency  
16 as headquarters shall be designed, constructed, main-  
17 tained, and operated as a model to demonstrate principles  
18 and practices for protection of indoor air quality.

19 (e) BUILDING COMMENTS.—(1) The Administrator  
20 of the General Services Administration, in consultation  
21 with the Administrator, the Assistant Secretary for Occu-  
22 pational Safety and Health Administration, and the Direc-  
23 tor, shall provide, by regulation, a method and format for  
24 filing and responding to comments and complaints con-  
25 cerning indoor air quality in Federal buildings by workers

1 in such buildings and by the public. The procedure for  
2 filing and responding to worker complaints shall supple-  
3 ment and not diminish or supplant existing practices or  
4 procedures established under the Occupational Safety and  
5 Health Act and executive orders pertaining to health and  
6 safety for Federal employees.

7 (2) A listing of each such filing and an analysis of  
8 such filings shall be included in each response plan pre-  
9 pared pursuant to this section. Such listing shall preserve  
10 the confidentiality of individuals making filings under this  
11 section. Such listing shall preserve the confidentiality of  
12 the individuals making filings under this section.

13 (3) Regulations implementing this subsection shall be  
14 promulgated at the earliest possible date, but not later  
15 than twenty-four months from the date of enactment of  
16 this title.

17 (f) BUILDING VENTILATION AND MANAGEMENT  
18 TRAINING.—(1) Within six months of the date of enact-  
19 ment of this title the Administrator of the General Serv-  
20 ices Administration shall designate, or require that a les-  
21 see designate, an Indoor Air Quality Coordinator for each  
22 Federal building which is owned or leased by the General  
23 Services Administration. An Indoor Air Quality Coordina-  
24 tor shall not serve more than one building.

1       (2) Within forty-eight months of the date of enact-  
2 ment of this title, each Indoor Air Quality Coordinator  
3 shall complete the indoor air training course operated pur-  
4 suant to section 6(b) of this Act. After thirty-six months  
5 from the date of enactment of this title, each newly des-  
6 igned Indoor Air Quality Coordinator shall complete the  
7 indoor air training course within twelve months of des-  
8 ignation.

9       (3) In any case where the Administrator of the Gen-  
10 eral Services Administration finds that a lessee has failed  
11 to designate and train an Indoor Air Quality Coordinator  
12 pursuant to the requirements of this Act, the Adminis-  
13 trator of the General Services Administration shall not re-  
14 establish a lease for such building.

15 **SEC. 10. STATE AND LOCAL INDOOR AIR QUALITY PRO-**  
16 **GRAMS.**

17       (a) MANAGEMENT AND ASSESSMENT STRATEGY  
18 DEMONSTRATION.—(1) The Governor of a State may  
19 apply to the Administrator for a grant to support dem-  
20 onstration of the development and implementation of a  
21 management strategy and assessment with respect to in-  
22 door air quality within such State.

23       (2) State indoor air quality management strategies  
24 shall—

1 (A) identify a lead agency and provide an insti-  
2 tutional framework for protection of indoor air qual-  
3 ity;

4 (B) identify and describe existing programs,  
5 controls or related activities concerning indoor air  
6 quality within State agencies including regulations,  
7 educational programs, assessment programs, or  
8 other activities;

9 (C) identify and describe existing programs,  
10 controls, or related activities concerning indoor air  
11 quality of local and other sub-State agencies and as-  
12 sure coordination among local, State, and Federal  
13 agencies involved in indoor air quality activities in  
14 the State; and

15 (D) assure coordination of indoor air quality  
16 programs with ambient air quality programs and re-  
17 lated activities.

18 (3) State indoor air quality assessment programs  
19 shall—

20 (A) identify indoor air contaminants of concern  
21 and, to the extent practicable, assess the seriousness  
22 and the extent of indoor air contamination by con-  
23 taminants listed in section 7(a) of this Act;

24 (B) identify the classes or types of buildings or  
25 other indoor environments in which indoor air con-

1       taminants pose the most serious threat to human  
2       health;

3             (C) if applicable, identify geographic areas in  
4       the State where there is a reasonable likelihood of  
5       indoor air contamination as a result of the presence  
6       of contaminants in the ambient air or the existence  
7       of sources of a contaminant;

8             (D) identify methods and procedures for indoor  
9       air contaminant assessment and monitoring;

10            (E) provide for periodic assessments of indoor  
11       air quality and identification of indoor air quality  
12       changes and trends; and

13            (F) establish methods to provide information  
14       concerning indoor air contamination to the public  
15       and to educate the public and interested groups, in-  
16       cluding building owners and design and engineering  
17       professionals, about indoor air contamination.

18       (4) As part of a management strategy and assess-  
19       ment pursuant to this subsection, the applicant may de-  
20       velop contaminant action levels, guidance, or standards  
21       and may draw on health advisories developed pursuant to  
22       section 7 of this Act.

23       (5) States which are selected to demonstrate the de-  
24       velopment of management and assessment strategies shall  
25       provide a management strategy and assessment pursuant

1 to paragraphs (2) and (3) to the Administrator within  
2 thirty-six months of selection and shall certify to the Ad-  
3 ministrator that the strategy and assessment meet the re-  
4 quirements of this Act.

5 (6) States shall provide for public review and com-  
6 ment on the management strategy and assessment prior  
7 to submission of such strategy and assessment to the Ad-  
8 ministrator.

9 (b) RESPONSE PROGRAMS.—(1) A Governor of a  
10 State or the executive officer of a local air pollution control  
11 agency may apply to the Administrator for grant assist-  
12 ance to develop a response program designed to reduce  
13 human exposure to an indoor air contaminant or contami-  
14 nants in the State, or in a specific class or type of building  
15 in that State, or in a specific geographic area of that  
16 State.

17 (2) A response program shall—

18 (A) address a contaminant or contaminants list-  
19 ed pursuant to section 7(a) of this Act;

20 (B) identify existing data and information con-  
21 cerning the contaminant or contaminants to be ad-  
22 dressed, the class or type of building to be ad-  
23 dressed, and the specific geographic area to be ad-  
24 dressed;

1 (C) describe and schedule the specific actions to  
2 be taken to reduce human exposure to the identified  
3 contaminant or contaminants including the adoption  
4 and enforcement of any ventilation standards;

5 (D) identify the State or local agency or public  
6 organization which will implement the response ac-  
7 tions;

8 (E) identify the Federal, State, and local finan-  
9 cial resources to be used to implement the response  
10 program; and

11 (F) provide for the assessment of the effective-  
12 ness of the response program.

13 (3) As part of a response program pursuant to this  
14 subsection, an applicant may develop contaminant action  
15 levels, guidance, or standards based on health advisories  
16 developed pursuant to section 7 of this Act.

17 (4) As part of a response program pursuant to this  
18 subsection, an applicant may develop a standard establish-  
19 ing a ventilation rate or rates for a class or classes of  
20 buildings including development assessment and compli-  
21 ance programs needed to implement the standard.

22 (5) As part of the response program pursuant to this  
23 subsection, an applicant may develop a response plan ad-  
24 dressing indoor air quality in State and local government  
25 buildings. Such plans shall, to the fullest extent prac-

1 ticable, be consistent with response plans developed pursu-  
2 ant to section 9 of this Act.

3 (c) GRANT MANAGEMENT.—(1) Grants under sub-  
4 section (a)(1) of this subsection shall not be less than  
5 \$75,000 for each fiscal year.

6 (2) In selecting States for demonstration and imple-  
7 mentation of management strategies and assessments  
8 under subsection (a)(1) the Administrator shall con-  
9 sider—

10 (A) the previous experience of the State in ad-  
11 dressing indoor air quality issues;

12 (B) the seriousness of the indoor air quality is-  
13 sues identified by the State; and

14 (C) the potential for demonstration of innova-  
15 tive management or assessment measures which may  
16 be of use to other States.

17 (3) In selecting States for demonstration of manage-  
18 ment strategies and assessments under subsection (a)(1),  
19 the Administrator shall focus resources to assure that suf-  
20 ficient funds are available to selected States to provide for  
21 the development of comprehensive and thorough manage-  
22 ment strategies and assessments in each selected State  
23 and to adequately demonstrate implementation of such  
24 strategies and assessments.

1 (4) Grants under subsection (b)(1) of this section  
2 shall not exceed \$250,000 per fiscal year and shall be  
3 available to the State for a period of not to exceed three  
4 years.

5 (5) In selecting response programs developed under  
6 subsection (b) for grant assistance, the Administrator  
7 shall consider—

8 (A) the potential for the response program to  
9 bring about reductions in indoor air contaminant  
10 levels;

11 (B) the contaminants to be addressed, giving  
12 priority to contaminants for which health advisories  
13 have been developed pursuant to section 207 of this  
14 title;

15 (C) the type of building to be addressed, giving  
16 priority to building types in which substantial  
17 human exposures to indoor air contaminants occur;

18 (D) the potential for development of innovative  
19 response measures or methods which may be of use  
20 to other States or local air pollution control agen-  
21 cies; and

22 (E) the State indoor air quality management  
23 strategy and assessment, giving priority to States  
24 with complete indoor air management strategies and  
25 assessments.

1       (6) The Federal share of grants under subsections  
2 (a) and (b) of this section shall not exceed 75 per centum  
3 of the costs incurred in demonstration and implementation  
4 of such activities and shall be made on the condition that  
5 the non-Federal share is provided from non-Federal funds.

6       (7) Funds granted pursuant to subsections (a) and  
7 (b) of this section in a fiscal year shall remain available  
8 for obligation for the next fiscal year in which obligated  
9 and for the next following fiscal year.

10       (8) No grant shall be made under this section in any  
11 fiscal year to a State or local air pollution control agency  
12 which in the preceding year received a grant under this  
13 section unless the Administrator determines that such  
14 agency satisfactorily implemented such grant activities in  
15 such preceding fiscal year.

16       (9) States and air pollution control agencies shall  
17 provide such information in applications for grant assist-  
18 ance and pertaining to grant funded activities as the Ad-  
19 ministrator requires.

20 **SEC. 11. OFFICE OF INDOOR AIR QUALITY.**

21       (a) ESTABLISHMENT.—The Administrator shall es-  
22 tablish an Office of Indoor Air Quality within the Office  
23 of Air and Radiation at the Environmental Protection  
24 Agency.

1 (b) RESPONSIBILITIES.—The Office of Indoor Air  
2 Quality shall—

3 (1) list indoor air contaminants and develop  
4 health advisories pursuant to section 7 of this Act;

5 (2) develop national indoor air quality response  
6 plans as provided for in section 8 of this Act;

7 (3) manage Federal grant assistance provided  
8 to air pollution control agencies under section 10 of  
9 this Act;

10 (4) assure the coordination of Federal statutes  
11 and programs administered by the Agency relating  
12 to indoor air quality and reduce duplication or in-  
13 consistencies among these programs;

14 (5) work with other Federal agencies, including  
15 the Occupational Safety and Health Administration  
16 and the National Institute for Occupational Safety  
17 and Health, to assure the effective coordination of  
18 programs related to indoor air quality; and

19 (6) work with public interest groups, labor or-  
20 ganizations, and the private sector in development of  
21 information related to indoor air quality including  
22 the health threats of human exposure to indoor air  
23 contaminants, the development of technologies and  
24 methods to control such contaminants, and the de-

1        velopment of programs to reduce contaminant con-  
2        centrations.

3        **SEC. 12. COUNCIL ON INDOOR AIR QUALITY.**

4        (a) **AUTHORITY.**—There is established a Council on  
5        Indoor Air Quality.

6        (b) **RESPONSIBILITIES.**—The Council on Indoor Air  
7        Quality shall—

8                (1) provide for the full and effective coordina-  
9                tion of Federal agency activities relating to indoor  
10              air quality;

11              (2) provide a forum for resolution of conflicts  
12              or inconsistencies in policies or programs related to  
13              indoor air quality;

14              (3) review and comment on the national indoor  
15              air response program developed pursuant to section  
16              208 of this title and the Federal Building Response  
17              Plan developed pursuant to section 9(b); and

18              (4) prepare a report to Congress pursuant to  
19              subsection (d) of this subsection.

20        (c) **ORGANIZATION.**—(1) The Council on Indoor Air  
21        Quality shall include senior representatives of Federal  
22        agencies involved in indoor air quality programs includ-  
23        ing—

24              (A) the Environmental Protection Agency;

1 (B) the Occupational Safety and Health Admin-  
2 istration;

3 (C) the National Institute of Occupational Safe-  
4 ty and Health;

5 (D) the Department of Health and Human  
6 Services;

7 (E) the Department of Housing and Urban  
8 Development;

9 (F) the Department of Energy;

10 (G) the Department of Transportation;

11 (H) the Consumer Product Safety Commission;

12 and

13 (I) the General Services Administration.

14 (2) The representative of the Environmental Protec-  
15 tion Agency shall chair the Council in the two years follow-  
16 ing enactment of this Act. In each subsequent year, mem-  
17 bers of the Council shall select the chair for that year.

18 (3) The Council shall be served by a staff to include  
19 an Executive Director and not less than three full-time  
20 equivalent employees.

21 (d) REPORT TO CONGRESS.—(1) The Council shall  
22 submit to the Congress, within eighteen months of enact-  
23 ment of this title, and biennially thereafter, a report which  
24 shall—

1 (A) describe and assess the seriousness, extent,  
2 and characteristics of indoor air contamination  
3 throughout the country;

4 (B) summarize the major research issues con-  
5 cerning the protection of indoor air quality, describe  
6 the research accomplishments of Federal agencies  
7 over the previous two years, and provide an agenda  
8 of indoor air quality research for individual Federal  
9 agencies over a three-year period;

10 (C) summarize actions taken pursuant to this  
11 title over the previous year, including publication of  
12 health advisories, implementation of national and  
13 Federal building response plans, and assistance to  
14 States;

15 (D) provide a general description of the activi-  
16 ties to be conducted by Federal agencies to address  
17 indoor air quality problems over the following three-  
18 year period; and

19 (E) make recommendations for any actions  
20 needed to assure the quality of indoor air, including  
21 recommendations relating to institutional structures,  
22 funding, and legislation.

23 (2) The Council shall provide for public review and  
24 comment on the report required by this subsection.

1 **SEC. 13. INDOOR AIR QUALITY INFORMATION CLEARING-**  
2 **HOUSE.**

3 (1) The Administrator is authorized and directed to  
4 establish a national indoor air quality clearinghouse to be  
5 used to disseminate indoor air quality information to other  
6 Federal agencies, State, and local governments, and pri-  
7 vate organizations and individuals.

8 (2) The clearinghouse shall be a repository for reli-  
9 able indoor air quality related information to be collected  
10 from and made available to government agencies and pri-  
11 vate organizations and individuals. At a minimum, the  
12 clearinghouse established by this section shall make avail-  
13 able reports, programs, and materials developed pursuant  
14 to the requirements of this Act.

15 (3) The clearinghouse shall operate a toll-free “hot-  
16 line” on indoor air quality which shall be available to pro-  
17 vide to the public general information about indoor air  
18 quality and general guidance concerning response to in-  
19 door air quality contamination problems.

20 (4) The Administrator may provide for the design,  
21 development, and implementation of the clearinghouse  
22 through a contractual agreement with a nonprofit organi-  
23 zation.

24 **SEC. 14. BUILDING ASSESSMENT DEMONSTRATION.**

25 (a) **AUTHORITY.**—(1) The Director of the National  
26 Institute for Occupational Safety and Health shall, in con-

1 sultation with the Administrator, implement a Building  
2 Assessment Demonstration Program to support develop-  
3 ment of methods, techniques, and protocols for assessment  
4 of indoor air contamination in nonresidential,  
5 nonindustrial buildings and to provide assistance and  
6 guidance to building owners and occupants on measures  
7 to reduce indoor air contamination.

8 (2) In implementation of this section, the Director  
9 shall have the authority to conduct on-site assessments of  
10 individual buildings, including Federal, State, and municipi-  
11 pal buildings.

12 (3) Nothing in this section shall in any way limit or  
13 constrain existing authorities pursuant to the Occupa-  
14 tional Safety and Health Act of 1970 (29 U.S.C. 651).

15 (b) ASSESSMENT ELEMENTS.—Assessments of indi-  
16 viduals buildings conducted pursuant to this section shall,  
17 at a minimum, provide—

18 (1) an identification of suspected contaminants  
19 in the air in the building and the level of such con-  
20 taminants;

21 (2) an assessment of the probable sources of  
22 contaminants in the air in the building;

23 (3) a review of the nature and extent of health  
24 concerns and symptoms identified by building occu-  
25 pants;

1           (4) an assessment of the probable association of  
2 indoor air contaminants with the health and related  
3 concerns of building occupants including assessment  
4 of occupational and environmental factors which  
5 may relate to the health concerns;

6           (5) identification of appropriate measures to  
7 control contaminants in the air in the building, to  
8 reduce the concentration levels of contaminants, and  
9 to reduce exposure to contaminants; and

10          (6) evaluation of the effectiveness of response  
11 measures in control and reduction of contaminants  
12 and contaminant levels, the change in occupant  
13 health concerns and symptoms, the approximate  
14 costs of such measures, and any additional response  
15 measures which may reduce occupant's health con-  
16 cerns.

17          (c) ASSESSMENT REPORTS.—(1) The Director shall  
18 prepare—

19           (A) a preliminary report of each building as-  
20 sessment which shall document findings concerning  
21 assessment elements in paragraphs (1) through (5)  
22 of subsection (b); and

23           (B) a final report which shall provide an overall  
24 summary of the building assessment including infor-  
25 mation on the effectiveness and cost of response

1 measures, and the potential for application of re-  
2 sponse measures to other buildings.

3 (2) Preliminary assessment reports shall be prepared  
4 not later than one hundred and eighty days after the selec-  
5 tion of a building for assessment. Final assessment reports  
6 shall be prepared not later than one hundred and eighty  
7 days after completion of the preliminary report.

8 (3) Preliminary and final reports shall be made avail-  
9 able to building owners, occupants, and the authorized  
10 representatives of occupants.

11 (d) BUILDING ASSESSMENT PROPOSAL.—(1) The Di-  
12 rector shall consider individual buildings for assessment  
13 under this section in response to a proposal identifying  
14 the building and the building owner and providing prelimi-  
15 nary, background information about the nature of the in-  
16 door air contamination, previous response to air contami-  
17 nation problems, and the characteristics, occupancy, and  
18 uses of the building.

19 (2) Building assessment proposals may be submitted  
20 by a building owner or occupants or the authorized rep-  
21 resentatives of building occupants, including the author-  
22 ized representatives of employees working in a building.

23 (e) BUILDING ASSESSMENT SELECTION.—(1) In se-  
24 lection of buildings to be assessed under this section the  
25 Director shall consider—

1 (A) the seriousness and extent of apparent in-  
2 door air contamination and human health effects of  
3 such contamination;

4 (B) the proposal for a building assessment sub-  
5 mitted pursuant to subsection (d) of this section;

6 (C) the views and comments of the building  
7 owners;

8 (D) the potential for the building assessment to  
9 expand knowledge of building assessment methods  
10 including identification of contaminants, assessment  
11 of sources, and development of response measures;  
12 and

13 (E) the listing of a building pursuant to sub-  
14 paragraph (C) of section 9(b)(3).

15 (2) The Director shall provide a preliminary response  
16 and review of building assessment proposals to applicants  
17 and the applicable building owner within sixty days of re-  
18 ceipt of a proposal and, to the extent practicable, shall  
19 provide a final decision concerning selection of a proposal  
20 within one hundred and twenty days of submittal.

21 (f) BUILDING ASSESSMENT SUPPORT.—(1) The Di-  
22 rector may enter into agreements with private individuals,  
23 firms, State and local governments, or academic institu-  
24 tions for services and related assistance in conduct of as-  
25 sessments under the authority of this section.

1           (2) The Director may enter into agreements with  
2 other Federal agencies for the assignment of Federal em-  
3 ployees to a specific building assessment project for peri-  
4 ods of up to one hundred and eighty days.

5           (g) SUMMARY REPORT.—(1) The Director shall pro-  
6 vide, on an annual basis, a report on the implementation  
7 of this section to the Administrator of the Environmental  
8 Protection Agency and to the Council on Indoor Air Qual-  
9 ity established pursuant to section 12 of this Act.

10          (2) The Director shall, from time to time and in con-  
11 sultation with the Administrator, publish general reports  
12 containing materials, information, and general conclusions  
13 concerning assessments conducted pursuant to this sec-  
14 tion. Such reports may address concerns related to reme-  
15 diation of indoor air contamination problems, assessment  
16 of health related concerns, and prevention of such prob-  
17 lems through improved design, materials and product  
18 specifications, and management practices.

19          (3) Reports prepared pursuant to this subsection and  
20 subsection (c) of this section shall be provided to the In-  
21 door Air Quality Information Clearinghouse provided for  
22 in section 13 of this Act and, to the extent practicable,  
23 such reports shall be made available to architectural, de-  
24 sign and engineering firms and to organizations represent-  
25 ing such firms.

1 **SEC. 15. STATE AND FEDERAL AUTHORITY.**

2 (a) GENERAL AUTHORITY.—Nothing in this title  
3 shall be construed, interpreted, or applied to preempt, dis-  
4 place, or supplant any other State or Federal law, whether  
5 statutory or common or any local ordinance.

6 (b) OCCUPATIONAL SAFETY AND HEALTH.—In exer-  
7 cising any authority under this title, the Administrator  
8 shall not, for purposes of section 4(b)(1) of the Occupa-  
9 tional Safety and Health Act of 1970 (29 U.S.C.  
10 653(b)(1)), be deemed to be exercising statutory authority  
11 to prescribe or enforce standards or regulations affecting  
12 occupational safety and health.

13 **SEC. 16. AUTHORIZATIONS.**

14 (a) For the purpose of carrying out sections 5, 6, and  
15 7 of this Act there is authorized to be appropriated  
16 \$20,000,000 for each of the fiscal years ending September  
17 30, 1994, 1995, 1996, 1997, and 1998. Of such sums ap-  
18 propriated, one quarter shall be reserved for implementa-  
19 tion of section 7 of this Act and one quarter shall be re-  
20 served for implementation of section 5(c) of this Act and  
21 \$1,000,000 shall be reserved for implementation of section  
22 6(b) of this Act.

23 (b) For the purpose of carrying out section 8, 9, 11,  
24 and 13 of this Act there is authorized to be appropriated  
25 \$10,000,000 for each of the fiscal years ending September  
26 30, 1994, 1995, 1996, and 1997, and 1998. Of such sums

1 appropriated, one-fifth shall be reserved for implementa-  
 2 tion of section 13 and one-fifth shall be reserved for imple-  
 3 mentation of section 9.

4 (c) For the purpose of carrying out section 10 of this  
 5 Act, there is authorized to be appropriated \$12,000,000  
 6 for each of the fiscal years ending September 30, 1994,  
 7 1995, 1996, 1997, and 1998. Of such sums appropriated,  
 8 one-third shall be reserved for the purpose of carrying out  
 9 section 10(b) of this Act.

10 (d) For the purpose of carrying out section 12 of this  
 11 Act there is authorized to be appropriated \$1,500,000 for  
 12 each fiscal year ending September 30, 1994, 1995, 1996,  
 13 1997, and 1998.

14 (e) For the purpose of carrying out section 14 of this  
 15 Act there is authorized to be appropriated \$5,000,000 for  
 16 each of the fiscal years ending September 30, 1994, 1995,  
 17 1996, 1997, and 1998.

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