

103D CONGRESS  
1ST SESSION

# S. 978

To establish programs to promote environmental technology, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

MAY 18 (legislative day, APRIL 19), 1993

Mr. BAUCUS (for himself, Mr. LIEBERMAN, Ms. MIKULSKI, Mr. KERRY, Mr. WOFFORD, and Mr. LAUTENBERG) 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 establish programs to promote environmental technology, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the  
5 “National Environmental Technology Act of 1993”.

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

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. Definitions.

TITLE I—NATIONAL ENVIRONMENTAL TECHNOLOGY PANEL

- Sec. 101. Establishment.
- Sec. 102. Membership.
- Sec. 103. National environmental technology strategy.
- Sec. 104. Coordination of budget requests for environmental technology.
- Sec. 105. Report to Congress.
- Sec. 106. Termination.

TITLE II—NATIONAL ENVIRONMENTAL TECHNOLOGIES  
INSTITUTE; CLEARINGHOUSE

- Sec. 201. Purposes.

Subtitle A—National Environmental Technologies Institute

- Sec. 211. Establishment.
- Sec. 212. Reports.
- Sec. 213. Environmental technology trade promotion.

Subtitle B—Environmental Technology Clearinghouse

- Sec. 221. Database.

TITLE III—ENVIRONMENTAL INNOVATION RESEARCH PROGRAM;  
TECHNOLOGY TESTING

- Sec. 301. Findings; purpose.

Subtitle A—Environmental Innovation Research Program

- Sec. 311. Environmental innovation research program.
- Sec. 312. Guidelines and regulations of the environmental innovation research program.

Subtitle B—Innovative Technology Testing

- Sec. 321. Program.

TITLE IV—ADDITIONAL PROGRAMS

Subtitle A—Verification of Environmental Technologies

- Sec. 401. Program.

Subtitle B—Environmental Technology Advisory Council

- Sec. 411. Establishment.
- Sec. 412. Report by the Comptroller General.

Subtitle C—Coordination With National Institute of Standards and  
Technology

- Sec. 421. Coordination with National Institute of Standards and Technology.
- Sec. 422. Coordination with other federally supported extension programs.

1 **SEC. 2. FINDINGS.**

2 Congress finds that—

1           (1) environmental problems facing the world  
2           pose a threat to the environmental and economic se-  
3           curity of the United States and other nations;

4           (2) promoting a sound economy while maintain-  
5           ing a healthy environment is among the urgent pub-  
6           lic policy challenges of the United States, on both  
7           domestic and international levels;

8           (3) the development and deployment of environ-  
9           mental technologies will both enhance global environ-  
10          mental security and the economic standing of the  
11          United States in the world marketplace;

12          (4) the growing demand for environmentally  
13          sound products and processes, and for cost-effective  
14          environmental cleanup and pollution control tech-  
15          nologies, presents strategic business opportunities;

16          (5) advances in environmental cleanup, pollu-  
17          tion control, and pollution prevention technologies  
18          could significantly reduce Government and private  
19          cleanup expenditures and improve cleanup results;

20          (6) innovative environmental technologies face  
21          barriers to commercialization and diffusion, and are  
22          often slow to be adopted;

23          (7) while the Federal Government, research in-  
24          stitutes, universities, and industries are conducting

1 substantial relevant basic environmental research  
2 and development—

3 (A) environmental concerns must become a  
4 more pervasive and central dimension of tech-  
5 nology research and development; and

6 (B) Federal environmental technology re-  
7 search and development programs should be  
8 better coordinated and better aligned with long-  
9 term, strategic environmental needs and busi-  
10 ness opportunities; and

11 (8) a coordinated, up-to-date, interagency strat-  
12 egy for environmental technology will greatly help  
13 the United States develop critical environmental  
14 technology that can respond to environmental pro-  
15 grams and create jobs and new sources of income.

16 **SEC. 3. DEFINITIONS.**

17 As used in this Act:

18 (1) ADMINISTRATOR.—The term “Adminis-  
19 trator” means the Administrator of the Environ-  
20 mental Protection Agency.

21 (2) COVERED FEDERAL AGENCY.—The term  
22 “covered Federal agency” means a Federal agency  
23 for which, for a fiscal year, an amount greater than  
24 \$50,000,000 is made available for environmental  
25 cleanup.

1           (3) CRITICAL ENVIRONMENTAL TECH-  
2           NOLOGY.—The term “critical environmental tech-  
3           nology” means environmental technology that—

4                   (A) embodies a significant technical ad-  
5           vance;

6                   (B) has the potential to bring about large,  
7           cost-effective reductions in risk to human health  
8           or the environment;

9                   (C) is generically applicable at the  
10          precommercial stage; and

11                  (D) if adopted, would result in a favorable  
12          ratio of social to private returns.

13           (4) DIRECTOR.—The term “Director” means  
14          the head of the National Environmental Technology  
15          Institute established under section 211.

16           (5) ENVIRONMENTAL INNOVATION RE-  
17          SEARCH.—The term “environmental innovation re-  
18          search” means research related to the development,  
19          application, or commercialization of environmental  
20          technology.

21           (6) ENVIRONMENTAL TECHNOLOGY.—The term  
22          “environmental technology” means a technology,  
23          product, or process that reduces environmental risks  
24          by—

1 (A) fulfilling a function other than protec-  
2 tion of the environment with less impact during  
3 its manufacture, use, or disposal on the envi-  
4 ronment than other technologies, products, and  
5 processes; and

6 (B) protecting or enhancing the environ-  
7 ment through pollution control, prevention, or  
8 environmental remediation.

9 (7) FUND.—The term “Fund” means the Envi-  
10 ronmental Advanced Research Projects Revolving  
11 Fund established under section 211(f).

12 (8) FUNDING AGREEMENT.—The term “fund-  
13 ing agreement” means a contract, cooperative agree-  
14 ment, grant agreement, patent agreement, royalty  
15 agreement, license agreement, equity agreement, or  
16 other appropriate legal agreement between the head  
17 of a covered Federal agency and a private business  
18 concern to provide funding and support to carry out  
19 environmental innovation research.

20 (9) INSTITUTE.—The term “Institute” means  
21 the National Environmental Technologies Institute  
22 established under section 211.

23 (10) SMALL BUSINESS CONCERN.—The term  
24 “small business concern” means a business concern  
25 that is recognized as a small business concern under

1 section 3(a) of the Small Business Act (15 U.S.C.  
2 632(a)).

3 **TITLE I—NATIONAL ENVI-**  
4 **RONMENTAL TECHNOLOGY**  
5 **PANEL**

6 **SEC. 101. ESTABLISHMENT.**

7 There is established within the Office of Science and  
8 Technology Policy a National Environmental Technology  
9 Panel (referred to in this section as the “Panel”), to oper-  
10 ate as a Presidential initiative panel of the Federal Coordi-  
11 nating Council for Science, Engineering, and Technology.  
12 The Panel shall be responsible for coordinating environ-  
13 mental technology programs within the Federal Govern-  
14 ment and the development of a National environmental  
15 technology strategy.

16 **SEC. 102. MEMBERSHIP.**

17 The Panel shall consist of—

- 18 (1) the Administrator;
- 19 (2) the Director of the National Science Foun-  
20 dation;
- 21 (3) the Administrator of the National Oceanic  
22 and Atmospheric Agency of the Department of Com-  
23 merce;
- 24 (4) the Secretary of Energy;
- 25 (5) the Secretary of the Interior;

1 (6) the Administrator of the National Aero-  
2 nautics and Space Administration;

3 (7) the Secretary of Agriculture;

4 (8) the Secretary of Defense;

5 (9) the Secretary of Health and Human Serv-  
6 ices;

7 (10) the Secretary of Commerce;

8 (11) the Secretary of Transportation;

9 (12) the United States Trade Representative;

10 (13) the Director of the National Environ-  
11 mental Technologies Institute; and

12 (14) the Director of the Office of Science and  
13 Technology Policy, who shall serve as the Chair-  
14 person of the Panel (referred to in this title as the  
15 “Chairperson”).

16 **SEC. 103. NATIONAL ENVIRONMENTAL TECHNOLOGY**  
17 **STRATEGY.**

18 (a) DEVELOPMENT OF NATIONAL ENVIRONMENTAL  
19 TECHNOLOGY STRATEGY.—Not later than 1 year after  
20 the date of enactment of this Act, the Panel shall develop  
21 a National Environmental Technology Strategy.

22 (b) STRATEGY REQUIREMENTS.—The Strategy  
23 shall—

24 (1) identify critical environmental technologies  
25 for focused governmental support;



1           (2) prioritize the technologies identified in para-  
2 graph (1) based on trends in global and domestic en-  
3 vironmental problems and the potential for economic  
4 benefits;

5           (3) recommend effective public and private  
6 partnership arrangements for the development and  
7 diffusion of environmental technologies;

8           (4) recommend approaches to encourage the  
9 commercialization and diffusion of environmental  
10 technologies, with special attention to small- and me-  
11 dium-sized business concerns;

12          (5) identify economic, regulatory, and other  
13 barriers and incentives to the development, deploy-  
14 ment, and trade in environmental technologies;

15          (6) recommend administrative actions to re-  
16 move barriers to and create incentives for the devel-  
17 opment and diffusion of environmental technology;

18          (7) recommend administrative actions to pro-  
19 mote and assist trade in United States environ-  
20 mental technology; and

21          (8) recommend, as appropriate, changes in Fed-  
22 eral procurement guidelines to promote the purchase  
23 of environmental technology.

1 (c) REVISION OF STRATEGY.—The Panel shall review  
2 and revise the Strategy not less frequently than once every  
3 3 years.

4 (d) COORDINATION WITH OTHER GROUPS.—

5 (1) IN GENERAL.—The Panel shall consult with  
6 organizations involved in formulating Federal tech-  
7 nology policy, organizations involved in technology  
8 development and commercialization, and organiza-  
9 tions involved in making recommendations for  
10 redirecting research on military applications to civil-  
11 ian uses, including—

12 (A) the National Critical Technologies  
13 Panel established under section 601 of the Na-  
14 tional Science and Technology Policy, Organiza-  
15 tion, and Priorities Act of 1976 (42 U.S.C.  
16 6681);

17 (B) the Advanced Manufacturing Council  
18 of the Federal Council established under section  
19 401 of such Act (42 U.S.C. 6651);

20 (C) the Defense Technology Conversion  
21 Council of the Advanced Research Projects  
22 Agency of the Department of Defense;

23 (D) the Advanced Research Projects Agen-  
24 cy of the Department of Defense;

1 (E) the Advanced Technology Program es-  
2 tablished under section 28 of the National In-  
3 stitutes of Standards and Technology Act (15  
4 U.S.C. 278n);

5 (F) the Strategic Environmental Research  
6 and Development Program Council established  
7 under section 2902 of title 10, United States  
8 Code;

9 (G) the Environmental Technology Advi-  
10 sory Council established under section 411; and

11 (H) the environmental innovation and re-  
12 search program established under section 311.

13 (2) RECOMMENDATIONS.—The Panel shall  
14 make recommendations to the organizations covered  
15 in paragraph (1) to avoid duplication of efforts and  
16 to promote coordination of environmental technology  
17 efforts.

18 (3) TECHNICAL SUPPORT.—The Chairperson  
19 shall provide technical assistance regarding policy  
20 formulation to the Panel and may request technical  
21 and policy assistance from members of the Panel  
22 and other organizations, including the Academies of  
23 Science and Engineering.

1 **SEC. 104. COORDINATION OF BUDGET REQUESTS FOR EN-**  
2 **VIRONMENTAL TECHNOLOGY.**

3 (a) STATUS OF FEDERAL ACTIVITY.—Not later than  
4 180 days after the date of enactment of this Act, and an-  
5 nually thereafter, the Chairperson, in consultation with  
6 the Director of the Office of Management and Budget,  
7 shall—

8 (1) submit to Congress a listing of all federally  
9 funded activities that promote, develop, or support  
10 environmental technology; and

11 (2) review the budget summary to determine  
12 whether the summary is consistent with the strategy  
13 developed under section 103.

14 (b) REPORT.—The Chairperson shall report any com-  
15 ments or views of the Panel regarding the budget sum-  
16 mary to the Director of the Office of Management and  
17 Budget.

18 (c) CONSIDERATION BY DIRECTOR OF OFFICE OF  
19 MANAGEMENT AND BUDGET.—The Director of the Office  
20 of Management and Budget shall—

21 (1) consider all Federal agency requests for re-  
22 search related to environmental technology as one  
23 integrated, coherent, and multiagency request; and

24 (2) review the budget summary developed in  
25 subsection (a) and the comments submitted in sub-

1 section (b) prior to submission of the annual budget  
2 request of the President.

3 **SEC. 105. REPORT TO CONGRESS.**

4 Not later than 1 year after the date of enactment  
5 of this Act, and annually thereafter, the Chairperson shall  
6 submit a report to Congress that includes—

7 (1) a summary of all Panel activities;

8 (2) the most recently prepared version of the  
9 strategy developed under section 103;

10 (3) any major findings of the Panel;

11 (4) the interagency budget summary developed  
12 under section 104 with any comments submitted by  
13 the Chairperson;

14 (5) descriptions of significant research initia-  
15 tives in environmental technology;

16 (6) a listing of all public and private partner-  
17 ships in critical environmental technology, including  
18 projects funded by—

19 (A) the Advanced Research Projects Agen-  
20 cy of the Department of Defense, excluding any  
21 classified information;

22 (B) the Advanced Technology Program es-  
23 tablished under section 28 of the National In-  
24 stitutes of Standards and Technology Act (15  
25 U.S.C. 278n);

1 (C) the National Environmental Tech-  
2 nologies Institute established under section 211;  
3 and

4 (D) the environmental innovations research  
5 program under section 311; and

6 (7) a listing of all federally funded activities  
7 that promote, develop, or support critical environ-  
8 mental technology identified under section  
9 103(b)(1).

10 **SEC. 106. TERMINATION.**

11 The authority provided by this title shall terminate  
12 on the date that is 7 years after the date of enactment  
13 of this Act.

14 **TITLE II—NATIONAL ENVIRON-**  
15 **MENTAL TECHNOLOGIES IN-**  
16 **STITUTE; CLEARINGHOUSE**

17 **SEC. 201. PURPOSES.**

18 It is the purpose of this title to improve the environ-  
19 ment and strengthen the economic competitiveness of the  
20 United States through—

21 (1) assisting private industry, universities, non-  
22 profit research centers, and Government laboratories  
23 in developing and commercializing environmental  
24 technologies; and

1           (2) facilitating the diffusion, adoption, and ex-  
2 port of environmental technologies by improving the  
3 information available on new environmental tech-  
4 nologies.

5 **Subtitle     A—National     Environ-**  
6 **mental Technologies Institute**

7 **SEC. 211. ESTABLISHMENT.**

8           (a) IN GENERAL.—

9           (1) ESTABLISHMENT OF INSTITUTE.—There is  
10 established within the Environmental Protection  
11 Agency the National Environmental Technologies  
12 Institute (referred to in this section as the “Insti-  
13 tute”).

14           (2) DIRECTOR.—The Institute shall be headed  
15 by a Director who shall be appointed by the Presi-  
16 dent, with the advice and consent of the Senate.

17           (3) CONFORMING AMENDMENT.—Section 5316  
18 of title 5, United States Code, is amended by adding  
19 at the end the following:

20           “Director of the National Environmental Tech-  
21 nologies Institute, Environmental Protection Agen-  
22 cy.”.

23           (b) FUNCTIONS.—The Director shall—

24           (1) in cooperation with the heads of other agen-  
25 cies, support and assist the development of products

1 oriented research, development, and demonstration  
2 of environmental technology at the precommercial  
3 stage by industrial, academic, governmental, and  
4 nongovernmental entities;

5 (2) monitor on a continuing basis the research  
6 and development being conducted on environmental  
7 technologies by private industry in the United States  
8 and provide technical assistance to private industry  
9 conducting environmental research;

10 (3) in cooperation with the heads of other agen-  
11 cies, develop and transfer environmental technologies  
12 and mechanisms to address international environ-  
13 mental problems;

14 (4) develop and maintain a clearinghouse, as es-  
15 tablished under subtitle B, to provide information to  
16 private and public concerns that develop, apply, or  
17 export environmental technology;

18 (5) advise other officials, as appropriate, within  
19 the Environmental Protection Agency, and within  
20 other Federal departments and agencies, on pro-  
21 grams and strategies for promoting the development  
22 and diffusion of environmental technology, including  
23 program managers for the environmental innovation  
24 research program established under subtitle A of  
25 title III, as appropriate;



1           (6) to the extent allowable by law, in coopera-  
2           tion with the Administrator or the head of any other  
3           Federal agency that the Director determines to be  
4           appropriate, ensure the availability of an initial mar-  
5           ket for critical environmental technologies;

6           (7) make recommendations for changes in Fed-  
7           eral procurement guidelines to ensure the availability  
8           of an initial market for environmental technology;  
9           and

10          (8) consult with the Panel established under  
11          title I and the programs established under title III.

12          (c) COOPERATIVE AGREEMENTS AND OTHER AR-  
13          RANGEMENTS.—

14               (1) IN GENERAL.—In carrying out the func-  
15               tions of the Institute under this subtitle, the Direc-  
16               tor may enter into cooperative agreements or other  
17               arrangements with—

18                       (A) any department, agency, or independ-  
19                       ent establishment of the United States;

20                       (B) any unit of State or local government;

21                       (C) any educational institution;

22                       (D) any company that is a United States-  
23                       owned company; or

24                       (E) any company that the Secretary finds  
25                       is incorporated in the United States and has a

1 parent company that is incorporated in a coun-  
2 try that—

3 (i) affords to United States-owned  
4 companies opportunities, comparable to  
5 those afforded to any other company, to  
6 participate in any cooperative agreement  
7 similar to those authorized under this sub-  
8 section;

9 (ii) affords to United States-owned  
10 companies local investment opportunities  
11 comparable to those afforded to any other  
12 company; and

13 (iii) affords adequate and effective  
14 protection for the intellectual property  
15 rights of United States-owned companies.

16 (2) AUTHORITY TO REQUIRE PAYMENT.—

17 (A) IN GENERAL.—A cooperative agree-  
18 ment or other arrangement entered into under  
19 paragraph (1) may include a provision that re-  
20 quires a person or other entity to make a pay-  
21 ment or payments to the Institute (or any other  
22 department, agency, or independent establish-  
23 ment of the United States) as a condition of re-  
24 ceiving assistance from the Institute under the  
25 agreement or other arrangement.

1 (B) AMOUNT OF PAYMENT.—The amount  
2 of any payment received by a department, agen-  
3 cy, or independent establishment of the United  
4 States pursuant to paragraph (1) shall be cred-  
5 ited to the Fund in such amount as the Direc-  
6 tor specifies.

7 (C) NONDUPLICATION AND OTHER CONDI-  
8 TIONS.—The Director shall ensure that, to the  
9 extent practicable, a cooperative agreement or  
10 other arrangement entered into under this sec-  
11 tion—

12 (i) does not provide for research that  
13 duplicates research being conducted under  
14 other programs carried out by the private  
15 sector or by a department, agency, or inde-  
16 pendent establishment of the United  
17 States; and

18 (ii) requires the other party to the  
19 agreement or arrangement to share the  
20 cost of the project or activity concerned.

21 (d) FEDERAL SHARE.—

22 (1) IN GENERAL.—Subject to paragraph (2),  
23 the Federal share of the cost of a research and de-  
24 velopment project under this section may not exceed  
25 50 percent.

1           (2) SMALL BUSINESS EXCEPTION.—The Fed-  
2           eral share of the cost of a research and development  
3           project conducted pursuant to a cooperative agree-  
4           ment or other arrangement entered into with a small  
5           business concern under subsection (c) may not ex-  
6           ceed 75 percent.

7           (e) PROGRAM REQUIREMENTS.—

8           (1) SELECTION CRITERIA.—

9           (A) IN GENERAL.—Not later than 180  
10          days after the date of enactment of this section,  
11          the Director shall publish in the Federal Reg-  
12          ister proposed criteria, and not later than 1  
13          year after the date of enactment of this section,  
14          following a public comment period, final cri-  
15          teria, for the selection of recipients of contracts,  
16          leases, grants, and cooperative agreements  
17          under this section.

18          (B) CRITERIA.—Selection criteria under  
19          subparagraph (A) shall—

20               (i) include requirements outlining  
21               business plans;

22               (ii) address the advancement of Unit-  
23               ed States environmental technology and  
24               the promotion of the competitiveness of  
25               businesses of the United States; and

1 (iii) give special consideration to the  
2 needs of small business concerns.

3 (2) ADMINISTRATION OF PROGRAM FUNDS.—In  
4 cooperation with the heads of other agencies, the Di-  
5 rector shall—

6 (A) determine categories of projects to be  
7 funded by the National Environmental Tech-  
8 nologies Institute;

9 (B) issue solicitations for projects to be  
10 funded by the Institute;

11 (C) receive and evaluate proposals result-  
12 ing from solicitations;

13 (D) select participants for funding agree-  
14 ments of the Institute;

15 (E) administer the funding agreements of  
16 the Institute; and

17 (F) make payments to recipients of fund-  
18 ing agreements on the basis of progress toward,  
19 or completion of, the funding agreement re-  
20 quirements.

21 (3) CONSULTATION.—The Director shall, as ap-  
22 propriate, consult with the Panel established in title  
23 I and with the Environmental Technology Advisory  
24 Council established in subtitle B of title IV.

1 (4) FINANCIAL REPORTING AND AUDITING.—

2 The Director, in consultation with the chief financial  
3 officer of the Environmental Protection Agency,  
4 shall establish financial reporting and auditing pro-  
5 cedures to ensure that contracts and awards—

6 (A) are used for the purposes specified in  
7 this section;

8 (B) are made in accordance with sound ac-  
9 counting practices; and

10 (C) are not used for research programs ex-  
11 isting or planned on the date of enactment of  
12 this section that would be substantially con-  
13 ducted in the same time period in the absence  
14 of financial assistance under this subtitle.

15 (5) DISSEMINATION OF RESEARCH RESULTS.—

16 The Director shall provide for the dissemination of  
17 research results of the programs of the Institute es-  
18 tablished under this subtitle through the database  
19 established under section 221.

20 (6) CONTRACTS OR AWARDS; CRITERIA; RE-  
21 STRICTIONS.—

22 (A) IN GENERAL.—No contract or award  
23 may be made under this section until the re-  
24 search project in question has been subject to  
25 a merit review by the Environmental Tech-

1 nology Advisory Council established under sec-  
2 tion 411, and has, in the opinion of the review-  
3 ers, been shown to have scientific and technical  
4 merit.

5 (B) DIRECT COSTS ONLY.—Federal funds  
6 made available under this subtitle shall be used  
7 only for direct costs and not for indirect costs,  
8 profits, or management fees of any contractor.

9 (C) CONSIDERATION.—In determining  
10 whether to make an award to a joint venture,  
11 the Director shall consider whether the mem-  
12 bers of the joint venture have provided for the  
13 appropriate participation of small businesses of  
14 the United States in the joint venture.

15 (D) ADMINISTRATIVE PROCEDURE.—Sec-  
16 tion 552 of title 5, United States Code, shall  
17 not apply to the following information obtained  
18 by the Federal Government on a confidential  
19 basis in connection with the activities of any  
20 business or joint venture that receives funding  
21 under this section:

22 (i) Information on the business oper-  
23 ation of a member of the business or joint  
24 venture.

1 (ii) Trade secrets possessed by any  
2 business or by a member of the joint ven-  
3 ture.

4 (E) INTELLECTUAL PROPERTY.—Intellec-  
5 tual property owned and developed by a busi-  
6 ness or joint venture that receives funding  
7 under this subtitle or by any member of such  
8 a joint venture may not be disclosed by any of-  
9 ficer or employee of the United States except in  
10 accordance with a written agreement between  
11 the owner or developer and the Director.

12 (F) LICENSING FEES AND ROYALTIES.—  
13 The United States shall be entitled to a share  
14 of the licensing fees and royalty payments made  
15 to and retained by a business or joint venture  
16 to which the United States contributes under  
17 this section in an amount that is proportionate  
18 to the Federal share of the costs incurred by  
19 the business or joint venture, as determined by  
20 an independent audit.

21 (G) DISCONTINUANCE.—A contract or  
22 award under this subtitle shall contain appro-  
23 priate provisions for the discontinuance of the  
24 project and the return of the unspent Federal  
25 funds to the Institute (after payment of all al-



1 lowable costs and an audit) if it appears that,  
2 due to technical difficulties, financial difficulty  
3 on the part of the recipient, or for any other  
4 reason, the recipient is not making satisfactory  
5 progress toward successful completion of the  
6 project.

7 (H) DISSOLUTION; RESIDUAL ASSETS.—  
8 Upon dissolution of a joint venture that receives  
9 funding under this section or at a time other-  
10 wise agreed upon, the United States shall be  
11 entitled to a share of the residual assets of a  
12 joint venture that is proportionate to the Fed-  
13 eral share of the costs of the joint venture, as  
14 determined by an independent audit.

15 (f) REVOLVING FUND.—

16 (1) ESTABLISHMENT.—There is established in  
17 the Treasury of the United States a revolving fund  
18 to be known as the “Environmental Advanced Re-  
19 search Projects Revolving Fund” (referred to in this  
20 section as the “Fund”), that shall consist of such  
21 amounts as are appropriated or credited to the Fund  
22 from time to time.

23 (2) EXPENDITURES FROM THE FUND.—  
24 Amounts in the Fund shall be available, as provided  
25 in appropriations Acts, to carry out this section.

1           (3) LOANS, GRANTS, LOAN GUARANTEES, AND  
2 OTHER FINANCIAL ASSISTANCE.—

3           (A) IN GENERAL.—The Director may use  
4 the Fund for the purpose of making loans,  
5 grants, loan guarantees (of both principal and  
6 interest), and other financial assistance to in-  
7 dustrial and nonprofit research centers, univer-  
8 sities, and other entities that serve the long-  
9 term environmental security needs of the Unit-  
10 ed States, to carry out this subtitle.

11           (B) REPAYMENT SCHEDULE.—A loan  
12 made under this section shall—

13           (i) have a repayment schedule and  
14 maturity date determined by the Secretary  
15 of the Treasury;

16           (ii) bear interest at a rate determined  
17 by the Secretary of the Treasury (as of the  
18 close of the calendar month preceding the  
19 month in which the loan is made) to be 3  
20 percent less than the current market yield  
21 on outstanding marketable obligations of  
22 the United States with remaining periods  
23 to maturity comparable to the period for  
24 which the loan is made.

1 (C) REPAYMENTS.—Repayments on a loan  
2 made under this section and the proceeds from  
3 any other agreement entered into by the Direc-  
4 tor under this subtitle shall be credited to the  
5 Fund.

6 (4) MANAGEMENT OF FUND.—

7 (A) IN GENERAL.—The Secretary of the  
8 Treasury shall manage the Fund and, after  
9 consultation with the Director, report to Con-  
10 gress each year on the financial condition and  
11 the results of the operation of the Fund during  
12 the preceding fiscal year and on the expected  
13 condition and operations of the Fund during  
14 the next 5 fiscal years.

15 (B) INVESTMENT.—

16 (i) AUTHORITY TO INVEST.—Subject  
17 to clause (ii), the Secretary of the Treas-  
18 ury shall invest the portion of the Fund  
19 that is not, in the judgment of the Sec-  
20 retary, required to meet current withdraw-  
21 als.

22 (ii) LIMITATION.—Investments of  
23 moneys in the Fund may be made only in  
24 interest-bearing obligations of the United  
25 States.

1 (g) AUTHORIZATION OF APPROPRIATIONS.—

2 (1) AMOUNTS.—There are authorized to be ap-  
3 propriated to the Institute to carry out this sec-  
4 tion—

5 (A) \$36,000,000 for fiscal year 1994;

6 (B) \$80,000,000 for fiscal year 1995; and

7 (C) \$120,000,000 for fiscal year 1996.

8 (2) LIMITATION ON USE.—Of amounts appro-  
9 priated to the Institute, not more than 5 percent  
10 may be used to pay for administrative expenses of  
11 the Institute.

12 (3) FEDERAL COOPERATIVE AGREEMENTS.—  
13 The Director shall allocate a significant percentage  
14 of the amounts made available to the Institute for  
15 the purpose of entering into cooperative agreements  
16 with departments, agencies, or independent estab-  
17 lishments of the United States pursuant to sub-  
18 section (c)(1).

19 **SEC. 212. REPORTS.**

20 (a) IN GENERAL.—The Director shall, not less fre-  
21 quently than annually, and at such other times as the Di-  
22 rector considers to be appropriate, submit a report to the  
23 Committees on Environment and Public Works and Ap-  
24 propriations of the Senate, and the Committees on

1 Science, Space, and Technology and Appropriations of the  
2 House of Representatives describing—

3 (1) the activities of the Institute, including de-  
4 scriptions and funding levels of all projects devel-  
5 oped with assistance from the Institute;

6 (2) each phase of the implementation and oper-  
7 ation of the environmental innovation research pro-  
8 grams administered by the Director and the heads  
9 of covered Federal agencies under subtitle A of title  
10 III;

11 (3) the plans of the Institute for future activi-  
12 ties;

13 (4) the manner and extent to which tech-  
14 nologies developed with assistance from the Institute  
15 have been commercialized and used; and

16 (5) the extent to which the technologies have  
17 been transferred to foreign nations.

18 (b) RECOMMENDATIONS.—Each report submitted  
19 under this section shall include such recommendations for  
20 program improvements as the Director considers to be ap-  
21 propriate.

22 **SEC. 213. ENVIRONMENTAL TECHNOLOGY TRADE PRO-**  
23 **MOTION.**

24 The Director shall—

1 (1) collect and disseminate through the clear-  
2 inghouse established under subtitle B, information  
3 useful for promoting the export of environmental  
4 technology, including information concerning—

5 (A) sources of financial assistance;

6 (B) sources of technical assistance; and

7 (C) the environmental needs of foreign na-  
8 tions;

9 (2) as appropriate, consult with the heads of  
10 other Federal agencies to facilitate the export of en-  
11 vironmental technologies; and

12 (3) consult with—

13 (A) the Working Group on the Environ-  
14 ment of the Trade Promotion Coordinating  
15 Council; and

16 (B) the National Environmental Tech-  
17 nology Trade Initiative within the Department  
18 of Commerce,

19 regarding the appropriate administrative actions for  
20 the promotion of trade in environmental technology.

21 **Subtitle B—Environmental**  
22 **Technology Clearinghouse**

23 **SEC. 221. DATABASE.**

24 (a) ESTABLISHMENT.—Not later than 2 years after  
25 the date of enactment of this section, the Administrator

1 shall establish an operational electronic database to serve  
2 as a clearinghouse for the collection and dissemination of  
3 nonproprietary information on environmental technology.

4 (b) CONTENTS.—The database shall include—

5 (1) descriptions of environmental technologies  
6 verified under the program established under section  
7 401;

8 (2) descriptions of environmental technologies  
9 tested under the program established under section  
10 321;

11 (3) descriptions of environmental technologies  
12 developed under programs of the Institute under sec-  
13 tion 311;

14 (4) descriptions of environmental technologies  
15 developed under the environmental innovation re-  
16 search programs established under title III;

17 (5) analytical test results, costs, vendor infor-  
18 mation, performance specifications, and other appro-  
19 priate information for all environmental technologies  
20 described in the database;

21 (6) information useful for promoting the export  
22 of environmental technology, including information  
23 concerning—

24 (A) sources of financial assistance;

25 (B) sources of technical assistance; and

1 (C) the environmental needs of foreign na-  
2 tions; and

3 (7) other relevant information on environmental  
4 technology.

5 (c) ACCESS TO CLEARINGHOUSE.—The clearinghouse  
6 shall be made available through an electronic data system  
7 (such as a computer bulletin board) and in paper report  
8 format, and shall be accessible to all persons and groups  
9 interested in environmental technology, including—

10 (1) industries that may use the evaluated envi-  
11 ronmental technologies either for compliance with  
12 any applicable regulations or voluntarily;

13 (2) Federal, State, and local programs likely to  
14 review permit applications proposing use of environ-  
15 mental technologies; and

16 (3) Federal, State, and local programs respon-  
17 sible for developing regulations establishing a level of  
18 performance or specific equipment for the preven-  
19 tion, mitigation, or abatement of environmental pol-  
20 lution.

21 (d) ADMINISTRATION.—

22 (1) UPDATING.—The data stored in the clear-  
23 ingshouse shall be updated continuously as new infor-  
24 mation is made available, but not less often than  
25 every 12 months.



1           (2) EXISTING RESOURCES.—The clearinghouse  
2 shall build on existing data sources and, to the ex-  
3 tent feasible, shall be integrated with other tech-  
4 nology databases maintained by the Environmental  
5 Protection Agency on the date of enactment of this  
6 section.

7           (3) OUTREACH.—The Administrator shall con-  
8 duct appropriate outreach efforts to advertise, de-  
9 liver, and disseminate the information stored in the  
10 clearinghouse.

11          (e) AUTHORIZATION OF APPROPRIATIONS.—There  
12 are authorized to be appropriated such sums as are nec-  
13 essary to carry out this section.

14 **TITLE III—ENVIRONMENTAL IN-**  
15 **NOVATION RESEARCH PRO-**  
16 **GRAM; TECHNOLOGY TEST-**  
17 **ING**

18 **SEC. 301. FINDINGS; PURPOSE.**

19          (a) FINDINGS.—Congress finds that:

20           (1) estimates of the cost to clean up the con-  
21 taminated sites in the United States range as high  
22 as \$1,000,000,000 over the next 30 years;

23           (2) the Office of Technology Assessment has  
24 found that, at some Federal sites, it may be impos-  
25 sible with current technology to remove contami-

1 nants from groundwater plumes and deeply buried  
2 soils;

3 (3) new technologies are needed to address  
4 these serious contamination problems in a more  
5 timely and cost-effective manner, with an enormous  
6 potential savings for the Government and private in-  
7 dustry;

8 (4) the use of innovative technologies at certain  
9 contaminated sites has reduced site cleanup costs by  
10 more than half; and

11 (5) demonstration and testing of environmental  
12 technologies for performance and cost characteristics  
13 is often a barrier to successful commercialization of  
14 environmental technology.

15 (b) PURPOSE.—It is the purpose of this title to re-  
16 duce Federal and private cleanup costs by promoting the  
17 development and commercialization of environmental tech-  
18 nologies.

19 **Subtitle A—Environmental**  
20 **Innovation Research Program**

21 **SEC. 311. ENVIRONMENTAL INNOVATION RESEARCH PRO-**  
22 **GRAM.**

23 (a) ESTABLISHMENT.—The head of each covered  
24 Federal agency shall establish an environmental innova-  
25 tion research program for the development and commer-

1 cialization of environmental technology to further the  
2 progress of cleanup, pollution prevention, or abatement ac-  
3 tivities of the agency.

4 (b) FUNDING.—

5 (1) IN GENERAL.—The head of each covered  
6 Federal agency shall annually—

7 (A) notwithstanding any other provision of  
8 law—

9 (i) set aside not less than 1.25 per-  
10 cent of the amount of funds made available  
11 to the agency for environmental cleanup;  
12 and

13 (ii) reserve the amount set aside  
14 under clause (i) for awards to private con-  
15 cerns or other entities for the development  
16 and commercialization of environmental  
17 technology through a uniform process as  
18 described in subsection (e); and

19 (B) consult with the Environmental Tech-  
20 nology Advisory Council established under sec-  
21 tion 411 and the Panel established under title  
22 I concerning the expenditure of the funds set  
23 aside pursuant to subparagraph (A).

24 (2) CONSTRUCTION.—Nothing in this Act shall  
25 be construed to limit the amount of funds that a

1 covered Federal agency may spend on the research,  
2 development, or commercialization of environmental  
3 technology or any other environmental activity.

4 (c) DUTIES OF HEADS OF COVERED FEDERAL  
5 AGENCIES.—In carrying out an environmental innovation  
6 research program established under this section, the head  
7 of each covered Federal agency shall, in accordance with  
8 the requirements of this section—

9 (1) certify annually the amount of agency funds  
10 set aside in accordance with subsection (b)(1)(A);

11 (2) determine categories of projects to be in-  
12 cluded in the environmental innovation research pro-  
13 gram of the agency;

14 (3) issue environmental innovation research so-  
15 licitations;

16 (4) receive and evaluate proposals resulting  
17 from the solicitations;

18 (5) select participants for the environmental in-  
19 novation research funding agreements of the covered  
20 Federal agency;

21 (6) in administering paragraphs (3), (4), and  
22 (5), consider the needs of small business concerns;

23 (7) administer the environmental innovation re-  
24 search funding agreements of the covered agency (or  
25 delegate the administration to another agency);

1           (8) make payments to recipients of environ-  
2           mental innovation research funding agreements on  
3           the basis of progress toward, or completion of, the  
4           funding agreement requirements; and

5           (9) submit an annual report on the environ-  
6           mental innovation research program to the National  
7           Environmental Technologies Institute established in  
8           section 211 and the Office of Science and Tech-  
9           nology Policy, which shall include—

10           (A) an accounting of the number and  
11           amount of awards made under the environ-  
12           mental innovation research program, classified  
13           by categories of projects; and

14           (B) the amount of funds awarded to  
15           projects for environmental cleanup, expressed  
16           as a percentage of the total funds awarded.

17           (d) COOPERATIVE AGREEMENTS.—The head of each  
18           covered Federal agency may enter into a cooperative  
19           agreement with the head of another Federal agency for  
20           the provision of technical assistance and other appropriate  
21           assistance to business concerns or other entities conduct-  
22           ing an approved project.

23           (e) PHASES OF ENVIRONMENTAL INNOVATION RE-  
24           SEARCH PROGRAM.—The head of each covered Federal

1 agency shall carry out an environmental innovation re-  
2 search program consisting of the following 3 phases:

3 (1)(A) A first phase for determining, insofar as  
4 possible, the scientific and technical merit and fea-  
5 sibility of ideas that appear to have commercial po-  
6 tential, submitted pursuant to environmental innova-  
7 tion research program solicitations.

8 (B) With respect to the first phase, the head of  
9 the covered Federal agency may enter into funding  
10 agreements with governmental, industrial, academic,  
11 and other nongovernmental entities, each of which  
12 shall be in an amount not to exceed \$250,000.

13 (2)(A) A second phase to further develop pro-  
14 posals that meet particular program needs, and with  
15 respect to which awards shall be made on the basis  
16 of the scientific and technical merit and feasibility of  
17 each proposal, as evidenced by the first phase (as  
18 described in paragraph (1)), taking into consider-  
19 ation, among other considerations, the commercial  
20 potential of each proposal, as evidenced by—

21 (i) the record of the private concern or  
22 other entity of successfully commercializing en-  
23 vironmental innovation research or other re-  
24 search;

1           (ii) the existence of funding commitments  
2           for the second phase carried out under this  
3           paragraph from the private sector or sources  
4           other than the environmental innovation re-  
5           search programs to fund the development  
6           phase;

7           (iii) the existence of follow-on commit-  
8           ments for the third phase carried out under  
9           paragraph (3) for research conducted pursuant  
10          to this clause; and

11          (iv) the presence of other indicators of the  
12          commercial potential of the proposal.

13          (B) With respect to the second phase, the head  
14          of the covered Federal agency may enter into fund-  
15          ing agreements with private concerns or other enti-  
16          ties, each of which shall be in an amount not to ex-  
17          ceed \$750,000, unless the head of the covered Fed-  
18          eral agency finds that additional funding is nec-  
19          essary and appropriate.

20          (3)(A) If appropriate, a third phase, in which—

21               (i) environmental innovation research fund-  
22               ing is used to continue development activity  
23               that has demonstrated outstanding commercial  
24               potential in the second phase of the environ-

1           mental research program and merits further en-  
2           vironmental innovation research funding;

3           (ii) awards from funding sources other  
4           than the environmental innovation research pro-  
5           grams are used for the continuation of research  
6           or research and development that has been  
7           competitively selected using peer review or sci-  
8           entific review criteria; or

9           (iii) commercial applications of research or  
10          research and development funded by environ-  
11          mental innovation research programs are fund-  
12          ed by non-Federal sources of capital or, for  
13          products or services intended for use by the  
14          Federal Government, by Federal funding  
15          sources other than environmental innovation re-  
16          search programs.

17          (B) With respect to a research and development  
18          project funded under subparagraph (A)(i), the Fed-  
19          eral share shall not exceed 50 percent of the total  
20          cost of the project.

21          (C) With respect to the assistance provided  
22          under this paragraph, the covered Federal agency  
23          may also assist the private concern or other entity  
24          in pursuing funding or procurement from other Fed-  
25          eral cleanup programs and in pursuing financial and



1 technical assistance for the export of technology de-  
2 veloped under the environmental innovation research  
3 program.

4 (4) Funding agreements authorized under para-  
5 graphs (2) and (3)(A)(i) may make available, if ap-  
6 propriate, funds to test environmental technology in  
7 the program established under section 321.

8 **SEC. 312. GUIDELINES AND REGULATIONS OF THE ENVI-**  
9 **RONMENTAL RESEARCH PROGRAM.**

10 (a) GUIDELINES.—Not later than 180 days after the  
11 date of enactment of this Act, the Director shall promul-  
12 gate guidelines for environmental innovation research con-  
13 ducted by covered Federal agencies pursuant to this sub-  
14 title.

15 (b) CONTENTS.—The guidelines promulgated by the  
16 Director under subsection (a) shall, at a minimum, provide  
17 for—

18 (1) simplified, standardized, and timely sollicita-  
19 tions of project proposals;

20 (2) a simplified, standardized funding process  
21 that provides for—

22 (A) the timely receipt and review of pro-  
23 posals;

24 (B) the protection of proprietary informa-  
25 tion provided in project proposals;

1 (C) the selection of environmental tech-  
2 nology projects;

3 (D) the retention of rights in data gen-  
4 erated in the performance of a contract or other  
5 agreement by the private concern under the en-  
6 vironmental technology research project;

7 (E) to the extent allowable by law, the  
8 transfer of title to property provided by a Fed-  
9 eral agency to the private concern conducting  
10 an environmental research project, if the trans-  
11 fer would be more cost-effective than recovery  
12 of the property by the Federal agency;

13 (F) cost sharing; and

14 (G) cost principles and payment schedules;

15 (3) exemptions from the requirements of para-  
16 graph (2) in any case in which national security or  
17 intelligence functions would be jeopardized; and

18 (4) to the extent allowable by law and as appro-  
19 priate, minimizing the regulatory burden of each pri-  
20 vate concern that participates in an environmental  
21 technology research project to improve the cost-ef-  
22 fectiveness of the environmental technology research  
23 and development conducted under the program.

24 (c) REGULATIONS.—The head of each covered Fed-  
25 eral agency shall, on the basis of the guidelines issued

1 under subsection (a), promulgate such regulations as are  
2 necessary to ensure that the environmental innovation re-  
3 search program of the covered Federal agency meets the  
4 requirements of the guidelines.

## 5 **Subtitle B—Innovative Technology** 6 **Testing**

### 7 **SEC. 321. PROGRAM.**

8 (a) ESTABLISHMENT.—In consultation with other ap-  
9 propriate Federal departments and agencies, the Adminis-  
10 trator shall establish a program for testing environmental  
11 technology at federally owned facilities and sites listed on  
12 the National Priorities List established under section  
13 105(a)(8)(B) of the Comprehensive Environmental Re-  
14 sponse, Compensation, and Liability Act of 1980 (42  
15 U.S.C. 9605(a)(8)(B)), and the inventory of Federal agen-  
16 cy hazardous waste facilities under section 3016 of the  
17 Resource Conservation and Recovery Act of 1976 (42  
18 U.S.C. 6937) (referred to in this section as “applicable  
19 sites”).

20 (b) DESCRIPTION.—As part of the program, the Ad-  
21 ministrator shall—

22 (1) enter into cooperative agreements with  
23 other Federal departments and agencies for the pur-  
24 pose of testing environmental technology at applica-  
25 ble sites;

1           (2) solicit and accept applications to test envi-  
2           ronmental technology suitable for prevention, con-  
3           trol, or remediation of contamination at applicable  
4           sites, subject to the guidelines established under sub-  
5           section (c);

6           (3) in consultation and cooperation with other  
7           Federal departments and agencies, State and local  
8           governments, industry consortia, and other groups  
9           interested in control, prevention, and remediation of  
10          environmental pollution at any applicable site, man-  
11          age and oversee testing and evaluation of environ-  
12          mental technology at applicable sites subject to the  
13          guidelines established under subsection (c);

14          (4) document the performance and cost charac-  
15          teristics provided by any environmental technology  
16          tested at an applicable site;

17          (5) list and disseminate, through the clearing-  
18          house established under section 221, nonproprietary  
19          information regarding the performance and cost  
20          characteristics of environmental technology that has  
21          been tested at one or more applicable sites and has  
22          been determined to be effective by the appropriate  
23          criteria in the guidelines established under sub-  
24          section (c); and

1           (6) build upon, not duplicate, and, to the extent  
2           feasible, incorporate existing Environmental Protec-  
3           tion Agency programs that facilitate testing of envi-  
4           ronmental technology at applicable sites, including  
5           the alternative or innovative treatment technology  
6           research and demonstration program established  
7           under section 311(b) of the Comprehensive Environ-  
8           mental Response, Compensation, and Liability Act  
9           of 1980 (42 U.S.C. 9660(b)).

10          (c) GUIDELINES.—Not later than 2 years after the  
11          date of enactment of this section, the Administrator shall,  
12          after notice and opportunity for comment, promulgate  
13          guidelines for the operation of the program established  
14          under this section. The guidelines shall include—

15                (1) an initial listing of applicable sites poten-  
16                tially available for testing of environmental tech-  
17                nology categorized by site characteristics, including  
18                site geology and site contaminants;

19                (2) the criteria designating eligibility of appli-  
20                cants to the program established under this section,  
21                including—

22                      (A) any business concern or consortium;

23                      (B) any small business concern or consor-  
24                      tium; or

1 (C) any nonprofit group, university, or  
2 State or local government entity or consortium;

3 (3) the application procedures for entities des-  
4 ignated under paragraph (2) desiring to apply for  
5 testing of environmental technology at an applicable  
6 site including data, equipment, and findings or dem-  
7 onstrations required in a complete application for  
8 testing, including—

9 (A) appropriate testing and analytical pro-  
10 cedures to demonstrate the effectiveness of an  
11 environmental technology;

12 (B) required data, findings, equipment, or  
13 demonstrations for a complete application for  
14 testing;

15 (C) provisions for sharing the costs of test-  
16 ing with applicants designated under subpara-  
17 graph (B) or (C) of paragraph (2) that limit  
18 the Federal share to not more than 50 percent  
19 of the total cost of testing;

20 (D) a business plan that includes—

21 (i) the environmental problem the en-  
22 vironmental technology is proposed to ad-  
23 dress;

24 (ii) the means by which the technology  
25 will be commercialized and marketed; and

- 1 (iii) the estimated benefits of the tech-  
2 nology, including—
- 3 (I) quantitative or qualitative es-  
4 timates of reductions in health and  
5 environmental risks; and
- 6 (II) the estimated number of jobs  
7 created if the technology is success-  
8 fully commercialized; and
- 9 (iv) the projected capitalization costs  
10 and income; and
- 11 (E) provisions that provide special consid-  
12 eration to the needs of small business concerns;
- 13 (4) criteria for verification of the efficacy of  
14 tested environmental technologies, including—
- 15 (A) the efficiency of destruction or removal  
16 of contaminants;
- 17 (B) the reduction in the volume, toxicity,  
18 or mobility of contaminants;
- 19 (C) the operational and capital costs; and  
20 (D) the operational reliability;
- 21 (5) specific procedures for the management and  
22 oversight of testing at applicable sites, including pro-  
23 cedures for consultation or entering mutual agree-  
24 ments with—

1 (A) other Federal departments and agen-  
2 cies responsible for management and remedi-  
3 ation of applicable sites;

4 (B) potentially responsible parties respon-  
5 sible for management and remediation of appli-  
6 cable sites;

7 (C) State and local government entities;

8 (D) private citizens or citizen groups con-  
9 cerned with management and remediation of  
10 applicable sites;

11 (E) nonprofit organizations concerned with  
12 management and remediation of applicable  
13 sites; or

14 (F) any persons or business concerns inter-  
15 ested in investing in the commercialization of  
16 tested environmental technology; and

17 (6) appropriate provisions to limit the liability  
18 and, to the extent feasible, indemnify successful ap-  
19 plicants to the program established under this sec-  
20 tion.

21 (d) LISTING OF VERIFIED TECHNOLOGY.—In the  
22 case of a technology tested under the program established  
23 by this section, the Administrator shall publish the test  
24 results, cost information, and a general description of the  
25 tested environmental technology, and disseminate the in-



1 formation through the clearinghouse established under  
2 section 221.

3 (e) AUDIT.—Not later than 3 years after the date of  
4 enactment of this Act, the Administrator shall audit the  
5 performance of the program and report the results of the  
6 audit to Congress, including—

7 (1) the number of sites where environmental  
8 technologies have been tested, classified by the type  
9 of problem remedied and the technology tested;

10 (2) the number of environmental technologies  
11 tested that have subsequently become commercially  
12 viable;

13 (3) the number of sites for which environmental  
14 technologies tested have been selected in a formal  
15 agency record of decision;

16 (4) the number of sites that have been fully  
17 remedied with environmental technologies tested in  
18 the program;

19 (5) the cost in terms of labor and contract  
20 funds expended by the agency on the program;

21 (6) the estimated number of jobs and increased  
22 income associated with the development and com-  
23 mercialization of the environmental technologies  
24 tested;

1           (7) the estimated risk reduced through the use  
2 of environmental technologies tested; and

3           (8) the appropriateness of expanding the pro-  
4 gram to additional sites.

5           (f) INCORPORATION OF DEMONSTRATED TECH-  
6 NOLOGY.—Where practicable, the covered Federal agency  
7 shall incorporate the demonstrated technology in the pre-  
8 vention, control, or remediation of contamination at appli-  
9 cable sites.

10          (g) FUNDING.—Evaluations conducted by the Admin-  
11 istrator under this section are eligible for funding under  
12 section 311.

13                   **TITLE IV—ADDITIONAL**  
14                   **PROGRAMS**

15                   **Subtitle A—Verification of**  
16                   **Environmental Technologies**

17           **SEC. 401. PROGRAM.**

18           (a) ESTABLISHMENT.—The Administrator shall es-  
19 tablish a program to evaluate, verify, and disseminate per-  
20 formance and cost information on environmental tech-  
21 nologies appropriate for compliance with regulations pro-  
22 mulgated under—

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

1           (2) the Federal Water Pollution Control Act  
2           (commonly referred to as the “Clean Water Act”)  
3           (33 U.S.C. 1251 et seq.);

4           (3) title XIV of the Public Health Service Act  
5           (commonly referred to as the “Safe Drinking Water  
6           Act”) (42 U.S.C. 300f et seq.);

7           (4) the Resource Conservation and Recovery  
8           Act of 1976 (42 U.S.C. 6901 et seq.); and

9           (5) other laws that the Administrator deter-  
10          mines appropriate,

11         collectively referred to in this section as “applicable regu-  
12         lations”.

13         (b) FUNCTIONS.—As part of the program, the Ad-  
14         ministrators shall—

15                 (1) accept applications to evaluate environ-  
16                 mental technology subject to the guidelines estab-  
17                 lished under subsection (c);

18                 (2) evaluate and verify the performance and  
19                 cost information on any environmental technology  
20                 provided by an applicant subject to the guidelines  
21                 established under subsection (c);

22                 (3) develop protocols, test procedures, and qual-  
23                 ity assurance procedures to ensure quality, credibil-  
24                 ity, and comparability of data and information devel-  
25                 oped by applicants; and

1           (4) list and disseminate information regarding  
2 environmental technology that meets or exceeds the  
3 appropriate criteria in the guidelines established  
4 under subsection (c) through the clearinghouse es-  
5 tablished under section 221.

6           (c) GUIDELINES.—

7           (1) IN GENERAL.—Not later than 18 months  
8 after the date of enactment of this Act, the Adminis-  
9 trator shall, after notice and opportunity for com-  
10 ment, promulgate guidelines for the operation of the  
11 program.

12           (2) DESCRIPTION.—The guidelines shall in-  
13 clude—

14           (A) criteria for determining eligibility of  
15 applicants to the program, including—

16                   (i) any large business concern;

17                   (ii) any small business concern; or

18                   (iii) any nonprofit group, university,  
19 or State or local government entity;

20           (B) application requirements and proce-  
21 dures for submitting data and information for  
22 evaluation and verification, including appro-  
23 priate specifications, protocols, and quality as-  
24 surance requirements relating to data and in-

1 formation development and presentation, in-  
2 cluding—

3 (i) appropriate, independently verified,  
4 analytical testing procedures to dem-  
5 onstrate compliance with the applicable  
6 regulations;

7 (ii) required data and findings; and

8 (iii) appropriate equipment or dem-  
9 onstrations;

10 (C) provisions excluding from verification  
11 any environmental technology that causes sig-  
12 nificant increases in environmental pollution in  
13 any media or is determined by the Adminis-  
14 trator to have other unacceptable side effects;

15 (D) general criteria for verification and  
16 listing of environmental technologies, includ-  
17 ing—

18 (i) compliance with any applicable  
19 regulation at a lower cost than the esti-  
20 mated cost of the technology used to estab-  
21 lish the applicable regulation; or

22 (ii) compliance with any applicable  
23 regulation with additional pollution preven-  
24 tion, control, or remediation benefits than

1 the technology used to establish an appli-  
2 cable regulation;

3 (E) a schedule of fees for applications to  
4 cover the costs of the program, including—

5 (i) a sliding scale of fees based on the  
6 category of eligible applicants defined in  
7 subparagraph (A); and

8 (ii) lower fees for applicants defined  
9 in clause (ii) or (iii) of subparagraph (A);  
10 and

11 (F) provisions that provide special consid-  
12 eration to the needs of small business concerns.

13 (d) LISTING OF TECHNOLOGY.—For technologies  
14 that the Administrator finds, through the evaluation pro-  
15 cedure established in subsection (c), meet or exceed all of  
16 the verification criteria established in subsection (c), the  
17 Administrator shall publish the results of the evaluation  
18 and a description of the evaluated environmental tech-  
19 nology and disseminate the information through the clear-  
20 inghouse established under section 221.

21 (e) ADMINISTRATION.—

22 (1) USE OF FEES.—All fees collected by the  
23 Administrator through the operation of the program  
24 established under this section shall be used to sup-  
25 port the operation of the program.

1           (2) EVALUATION DEADLINE.—All evaluations  
2           conducted under the program established under this  
3           section shall be completed, and the applicant notified  
4           of the results, not later than 6 months after the re-  
5           ceipt of a complete application.

6           (f) NO REVISION OF APPLICABLE REGULATIONS.—  
7           Nothing in this section shall be construed to revise any  
8           applicable regulation or release any person subject to an  
9           applicable regulation from the duty to fully comply with  
10          the applicable regulation.

11          (g) AUTHORIZATION OF APPROPRIATIONS.—There  
12          are authorized to be appropriated such sums as are nec-  
13          essary to carry out this section.

14                   **Subtitle B—Environmental**  
15                   **Technology Advisory Council**

16          **SEC. 411. ESTABLISHMENT.**

17          (a) ESTABLISHMENT.—There is established the Envi-  
18          ronmental Technology Advisory Council (referred to in  
19          this section as the “Advisory Council”).

20          (b) MEMBERSHIP.—The Director shall appoint the  
21          members of the Advisory Council. The individuals ap-  
22          pointed as members of the Advisory Council shall—

23                  (1) be eminent in the fields of business, re-  
24          search, new product development, engineering, labor,

1 education, management consulting, environment, or  
2 international relations;

3 (2) be selected solely on the basis of established  
4 records of distinguished service;

5 (3) not be employees of the Federal Govern-  
6 ment; and

7 (4) include—

8 (A) at least 1 representative of a leading  
9 consortium of manufacturing and technology  
10 firms;

11 (B) at least 1 representative of small busi-  
12 ness concerns;

13 (C) at least 1 representative of a State  
14 government;

15 (D) at least one representative of a local  
16 government body; and

17 (E) at least one representative of a non-  
18 governmental public interest organization.

19 (c) CHAIRPERSON AND VICE CHAIRPERSON.—

20 (1) SELECTION.—The Advisory Council shall  
21 appoint from among the members of the Advisory  
22 Council a person to serve as Chairperson and a per-  
23 son to serve as Vice Chairperson, each of whom shall  
24 serve as Chairperson or Vice Chairperson, respec-  
25 tively, for a term of 1 year and shall not thereafter



1 be eligible to serve as Chairperson or Vice Chair-  
2 person, respectively, until 1 year has elapsed after  
3 the end of the term.

4 (2) VICE CHAIRPERSON.—The Vice Chairperson  
5 of the Advisory Council shall perform the duties of  
6 the Chairperson in the absence of the Chairperson.

7 (d) DUTIES.—The Advisory Committee shall—

8 (1) review and make recommendations regard-  
9 ing general policy for the Institute established under  
10 title II, and the organization, budget, and programs  
11 of the Institute within the framework of national  
12 policies set forth by the President and Congress;

13 (2) review guidelines and regulations of the en-  
14 vironmental innovative research program established  
15 under title III;

16 (3) on the basis of the reviews conducted under  
17 paragraphs (1) and (2), make recommendations to  
18 the Administrator, the Director, and the head of  
19 each covered Federal agency regarding the merits of  
20 the distribution of the funds under proposed funding  
21 agreements to fund proposed projects under the en-  
22 vironmental innovation research program established  
23 under title III;

24 (4) establish merit review panels consisting of  
25 members with technical expertise and related busi-

1       ness experience to review proposals for funding sub-  
2       mitted to the Institute;

3           (5) consult with the heads of Federal agencies  
4       covered by the environmental innovation research  
5       program established under title III concerning the  
6       expenditure of funds from programs established  
7       under section 311;

8           (6) consult with the Panel established under  
9       title I in the development of the national environ-  
10      mental technology strategy;

11          (7) review the effectiveness of the clearinghouse  
12      established in section 221;

13          (8) make recommendations to the Director to  
14      improve the effective dissemination by the clearing-  
15      house of research information and results; and

16          (9) make recommendations to the Director re-  
17      garding administrative actions to promote the export  
18      of environmental technologies.

19   **SEC. 412. REPORT BY THE COMPTROLLER GENERAL.**

20       Not later than 2 years after the date of enactment  
21      of this Act, the Comptroller General of the United States  
22      shall submit to the Committees on Environment and Pub-  
23      lic Works and Appropriations of the Senate and the Com-  
24      mittee on Science, Space, and Technology and Appropria-  
25      tions of the House of Representatives a report concerning

1 the implementation of the programs established under ti-  
2 tles II and III, including a description of the research con-  
3 ducted under the programs.

4 **Subtitle C—Coordination With Na-**  
5 **tional Institute of Standards**  
6 **and Technology**

7 **SEC. 421. COORDINATION WITH NATIONAL INSTITUTE OF**  
8 **STANDARDS AND TECHNOLOGY.**

9 (a) AGREEMENTS.—Not later than 180 days after  
10 the date of enactment of this section, the Administrator  
11 and the Secretary of Commerce shall enter into such  
12 agreements as may be necessary to permit the Environ-  
13 mental Protection Agency to provide technical assistance  
14 and support to the Manufacturing Technology Centers ad-  
15 ministered by the National Institute of Standards and  
16 Technology of the Department of Commerce.

17 (b) ASSISTANCE.—The assistance shall include—

18 (1) the preparation of environmental assistance  
19 packages for small business concerns generally and,  
20 where appropriate, for specific small business sec-  
21 tors, including information on—

22 (A) environmental compliance require-  
23 ments and methods for achieving compliance;

24 (B) new environmental technologies;

1 (C) alternatives for preventing pollution  
2 that are generally applicable to the small busi-  
3 ness sectors;

4 (D) guidance for identifying and applying  
5 opportunities for preventing pollution at indi-  
6 vidual facilities;

7 (2) providing technical assistance to small busi-  
8 ness concerns seeking to act on the information pro-  
9 vided under paragraph (1);

10 (3) coordinating with the National Institute of  
11 Standards and Technology to identify those small  
12 business sectors that need improvement in environ-  
13 mental compliance or in developing methods to pre-  
14 vent pollution; and

15 (4) developing and implementing an action plan  
16 for providing assistance to improve environmental  
17 performance of small business sectors in need of im-  
18 provement.

19 **SEC. 422. COORDINATION WITH OTHER FEDERALLY SUP-**  
20 **PORTED EXTENSION PROGRAMS.**

21 The Administrator may coordinate with representa-  
22 tives of small business and agricultural extension pro-  
23 grams and centers, as appropriate, to provide environ-  
24 mental assistance to small businesses.



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