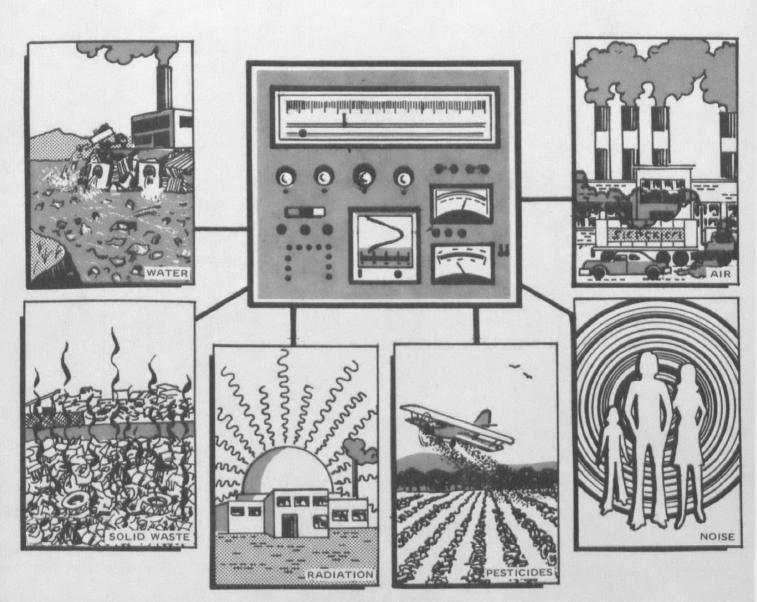
DIGEST of EPA's Monitoring-Related Statutory Authority



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DIGEST OF EPA'S

MONITORING-RELATED

STATUTORY AUTHORITY

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PURPOSE

The purpose of this document is to help identify
the U. S. Environmental Protection Agency's (EPA)
environmental monitoring requirements as dictated by
legislation. The document will also serve as a reference
to all environmental monitoring-related sections of the
laws for which the Agency has implementation responsibility.

INTRODUCTION

several acts that dictate the responsibilities the Agency must fulfill in protecting and enhancing the quality of the Nation's environment. Each act deals with a specific environmental problem area. Only in a very few instances does the legislation specifically direct that certain monitoring be conducted. However, information obtainable only through monitoring is necessary to effectively carry out much of the legislation. Thus, most of the environmental monitoring requirements are implied rather than specifically dictated by the legislation.

In addressing each environmental problem area covered by the legislation, the Agency generally must:

- Identify the present state of the environment
- Determine the environmental quality necessary to protect public health and welfare
- Identify and develop methods to control pollution
- Develop the necessary programs to ensure the attainment and maintenance of environmental quality standards.

These activities require monitoring of both the sources of pollution and the media into which the pollution is discharged or transported. In certain instances, the net effects—for example, fish kills—of environmental pollution on plants, animals, and materials must also be monitored.

DEFINITION OF ENVIRONMENTAL MONITORING

Environmental monitoring is the systematic collection and evaluation of physical, chemical, biological, and related data pertaining to environmental quality, pollution sources, and other factors that influence, or are influenced by, environmental quality. Environmental monitoring may be performed through Operation of Regional, nationwide, or

global networks or through special studies of individual areas, sites, or systems. The following types of activities are included:

- Field sampling/measurement/observation/ documentation of pollution sources, environmental conditions, and environmental impacts.
- Sample processing—for example, laboratory analysis of field samples and processing of photographic film/imagery.
- Processing and analysis of data obtained from the first two steps.

Environmental monitoring-support activities are defined as those activities that directly support monitoring activities as defined above. The two primary monitoring-support activities are:

- Development, testing, and evaluation of monitoring methods, instruments, and systems.
- Quality assurance, which covers selection of reference methods, quality control, and data audit programs.

The term "monitoring-related" identifies both monitoring and monitoring-support activities. Monitoring-related legislation requires that either directly or indirectly monitoring-related activities be performed.

MONITORING CATEGORIES

Environmental monitoring-related activities may be divided into eight categories:

- Long-term ambient monitoring
- Long-term source monitoring
- Enforcement (case-preparation) monitoring
- Research monitoring (that is, monitoring in support of research)
- Special short-term studies
- Statistical data acquisition
- Monitoring research and development (that is, research and development directed toward improvement of monitoring approaches and systems)
- Quality assurance

Long-Term Ambient Monitoring

Long-term ambient monitoring involves the measurement of pollutants in air, water, soil and biological matter over extended periods of time. The data are used primarily to evaluate:

 Local, Regional, and national longterm trends in pollutant levels and their effects on the total ecosystem

- Effectiveness of pollution abatement efforts being employed at the local, State, and Federal levels
- Compliance with environmental quality standards
- Potential problems—for example, persistence of pollutants in the biosphere.

Long-Term Source Monitoring

Long-term source monitoring involves the quantitative and qualitative assessment on a continuing basis of emissions or discharges of specific pollutants from various sources.

The data are used primarily to evaluate:

- Kinds and amounts of pollutants entering the environment
- Long-term trends in the amounts of specific pollutants being discharged
- Effectiveness of pollution control systems and practices being employed
- Compliance with regulations and requirements concerning pollution sources.

Enforcement Monitoring

Enforcement monitoring involves documenting violations of environmental quality, emission/effluent, and product standards. Data in this category are generally collected

through short-term intensive ambient and source monitoring efforts. Enforcement monitoring also includes determing if industry is complying with product registration, permit, and import regulations.

Research Monitoring

Research monitoring is monitoring carried out in conjunction with a research and development project.

Projects that typically require significant monitoring support include studies of the movement, distribution, fate, and effects of a specific pollutant entering a given environmental medium and assessment of the effectiveness of various experimental pollution control systems or procedures.

Special Short-Term Studies

Special short-term studies generally last less than

3 years and cover ambient and source monitoring conducted

for purposes other than those covered by enforcement and

research monitoring. A study might involve, for example,

calibration of mathematical simulation models for pre
dicting environmental quality levels under assumed pollution

loadings and meteorological/hydrological conditions. The

special studies might also cover collection of data to

support setting of standards, characterization of existing conditions or pollution problems and appropriate remedial measures in a given area, and assessment of effectiveness of pollution control systems or other abatement measures.

Statistical Data Acquisition

Acquisition of environmentally related statistical data covers efforts of a continuing nature that do not involve collection and analysis of environmental samples or any direct scientific measurement of pollution levels. The data, generally obtained through visual observation or extracted from statistical compilations prepared by other agencies (Bureau of the Census, for example) are useful in evaluating the nature and extent of pollution sources, causes, conditions, or effects. Examples of such efforts are inventorying the numbers and locations of fish kills, oil spills, and other pollution-caused episodes. Other examples are compilations of the names and locations of actual and potential pollution sources (for example, industries or municipalities), pesticide usage by geographical area, and production of toxic substances.

Monitoring Research and Development

Monitoring research and development is directed toward improvement of the state-of-the-art of monitoring methods and instruments. Activities in this category include:

- Development, testing, and evaluation of methodology and instrumentation
- Development of systematic approaches to the design of optimal monitoring programs
- Development, testing, and evaluation of improved systems for handling, integrating, and displaying data on total environmental quality.

Quality Assurance

Quality assurance activities cover the testing, selection, and validation of standard or reference methods for use in ambient and source monitoring, as well as operation of quality control and data audit programs to ensure and document the validity of the data generated.

LEGISLATIVE RESPONSIBILITIES OF EPA

The legislative responsibilities of EPA are contained in 18 acts covering the areas of air, water quality, water supply, solid wastes, pesticides, radiation, and noise pollution. In addition, the National Environmental

Policy Act requires assessments in all of these areas in the preparation of Environmental Impact Statements. Pending legislation, if enacted as drafted, will give EPA additional responsibilities in the areas of water supply and toxic substances control.

The key points in each are listed below.

Air

Clean Air Act (42 U.S.C. 1857 et seq.)

- Sets national air quality standards
- Sets emission standards for automobiles

Water Quality

Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.)

- Eliminates (if possible) discharge of all pollutants into navigable waters by 1985
- Sets interim level of water quality to be met by July 1, 1983

Marine Protection, Research, and Sanctuaries Act (33 U.S.C. 1401 et seq.)

- Establishes dumping permit program
- Authorizes monitoring and research program to investigate the longand short-term effects of dumping on the marine environment

Fish and Wildlife Act, as amended (16 U.S.C. 665)

 Authorizes investigations into ecological effects of sewage and industrial wastes

Water Supply

Public Health Service Act (42 U.S.C. 264)

• Regulates interstate water carriers

Solid Wastes

Solid Waste Disposal Act (42 U.S.C. 3251 et seq.)

- Authorizes research, demonstrations, training and grants for projects related to resource recovery systems and improved solid waste disposal facilities
- Requires that investigations be carried out to determine the efficacy of energy and materials recovery
- Establishes procedures to develop and recommend guidelines for model codes, ordinances, and statutes for solid waste recovery, collection, separation and disposal systems
- Requires the development of a National Disposal Sites Systems Report

Pesticides

Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. 136 et seq.)

- Registers pesticides
- Registers and inspects pesticideproducing establishments

- Certifies pesticide applicators
- Develops and implements a pesticide monitoring plan

Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321 et seq.)

• Specifies permissible pesticide residues on raw agricultural products

Public Health Service Act, as amended (42 U.S.C. 201 et seq.)

 Conducts research on the environmental and social health hazards of pesticides

Federal Water Pollution Control Act, as amended (33 U.S.C. 1254(1))

 Collects and disseminates scientific knowledge on the effects and control of pesticides in water

Studies of Effects in Use of Chemicals (16 U.S.C. 742d)

 Undertakes comprehensive continuing studies on the effects of pesticides to determine dose-effect relationships on the ecosystem

Special Packaging of Household Substances for Protection of Children (15 U.S.C. 1471 et seq)

 Allows EPA to establish standards for packaging and packaging materials that may be hazardous to children

Radiation

1954 Atomic Energy Act, as amended (42 U.S.C. 2021)

- Establishes Federal Radiation Council
- Provides for EPA's participation in radiation research and standards setting

Public Health Service Act (42 U.S.C. 201 et seq.)

 Conducts research and investigations on the environmental and social health hazards of radiation to enable the development of uniform radiation standards

Noise

Noise Control Act of 1972 (42 U.S.C. 4901 et seq.)

- Coordinates Federal research and activities in noise control
- Establishes Federal noise emission standards
- Provides information to the public on noise emission and noise reduction on products

Noise Pollution and Abatement Act of 1970 (42 U.S.C. 1858)

- Establishes Office of Noise Abatement and Control
- Conducts research on sources, levels, and effects of noise

Interdisciplinary

National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seg.)

- Establishes, within the Executive Office of the President, the Council on Environmental Quality to coordinate and assess environmental programs
- Requires all Federal agencies to prepare and submit to the Council on Environmental Quality, Environmental Impact Statements that systematically consider the environmental impact of and alternatives to each proposed major Federal activity

Airport and Airway Development Act, as amended (49 U.S.C. 1716)

 Requires evaluation and reporting of the environmental factor involved in the planning, development, and construction of airports

Federal Aid Highway Act, as amended (23 U.S.C. 109)

 Requires that guidelines be promulgated to assure that environmental factors are considered in developing highway projects

Pending Legislation

Safe Drinking Water Act of 1973

- Establishes Federal standards for drinking water and guidelines for the operation and maintenance of drinking water systems
- Establishes research, technical assistance, training, and grant programs in the field of water supply technology

Toxic Substances Control Act of 1973

 Regulates, through registration, reporting procedures, and premarket screening, the manufacture, distribution, and use of those chemical substances determined by standard test protocols to pose substantial danger to health or the environment

MONITORING-RELATED SECTIONS OF LEGISLATION

The monitoring-related sections of the acts outlined previously can be divided into two categories:

- Those sections specifically directing that monitoring be conducted by EPA or others--for example, establishment and implementation of a national pesticide monitoring plan.
- Those sections requiring accomplishments that cannot be met effectively without direct monitoring support—for example, setting and enforcement of environmental quality standards.

Because implementation of practically every section of any environmental legislation requires some background information based in part on monitoring results, only those sections dealing with activities judged to be only one step removed from the monitoring process are included. For example, one section of an act may call for research to develop and evaluate improved pollution control systems,

which would require some monitoring support. Another section may require publication of reports on improved pollution control systems. Only the former section is listed in this document. This approach is believed to result in a document that should better serve its potential users.

By far the greatest amount of EPA's monitoring requirements are associated with legislation in the second category. A considerable portion of EPA's monitoring requirements from both categories are shared with local, State, and other Federal agencies and the private sector. In shared situations, much of EPA's monitoring efforts are directed to closing gaps that cannot be closed by efforts of the other participants.

The remainder of this document excerpts the monitoringrelated portions of acts under which EPA presently operates and bills pending before Congress that EPA shall administer if enacted.

AIR-RELATED STATUTORY AUTHORITY

CLEAN AIR ACT

(42 U.S.C. 1857 et seq)

Section
Number

Activity Authorized

103(a)

"The Administrator shall establish a national research and development program for the prevention and control of air pollution and as part of such program shall—

- "(1) conduct, and promote the coordination and acceleration of, research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, and control of air pollution;
- "(3) conduct investigations and research and make surveys concerning any specific problem of air pollution in cooperation with any air pollution control agency with a view to recommending a solution of such problem, if he is requested to do so by such agency or if, in his judgment, such problem may affect any community or communities in a State other than that in which the source of the matter causing or contributing to the pollution is located;
- "(7) collect and disseminate, in cooperation with other Federal departments and agencies, and with other public or private agencies, institutions, and organizations having related responsibilities, basic data on chemical, physical, and biological effects of varying air quality and other information pertaining to air pollution and the prevention and control thereof; and
- "(8) develop effective and practical processes, methods, and prototype devices for the prevention or control of air pollution.

103(c)

"In carrying out the provisions of subsection (a) of this section the Administrator shall conduct research on, and survey the results of other scientific studies on the harmful effects on the health or welfare of persons by the various known air pollutants.

103(d)

"The Administrator is authorized to construct such facilities and staff and equip them as he determines to be necessary to carry out his functions under this Act.

103(f)

- "(1) In carrying out research pursuant to this Act, the Administrator shall give special emphasis to research on the short- and long-term effects of air pollutants on public health and welfare. In the furtherance of such research, he shall conduct an accelerated research program—
 - "(A) to improve knowledge of the contribution of air pollutants to the occurrence of adverse effects on health, including, but not limited to, behavioral, physiological, toxicological, and biochemical effects; and
 - "(B) to improve knowledge of the short- and long-term effects of air pollutants on welfare.

104(a)

- "The Administrator shall give special emphasis to research and development into new and improved methods, having industry-wide application, for the prevention and control of air pollution resulting from the combustion of fuels. In furtherance of such research and development he shall—
 - "(1) conduct and accelerate research programs directed toward development of improved, low-cost techniques for—-
 - "(A) control of combustion byproducts of fuels,
 - "(B) removal of potential air pollutants from fuels prior to combustion,
 - "(C) control of emissions from the evaporation of fuels,
 - "(D) improving the efficiency of fuels combustion so as to decrease atmospheric emissions, and
 - "(E) producing synthetic or new fuels which, when used, result in decreased atmospheric emissions."
 - "(3) determine, by laboratory and pilot plant testing, the results of air pollution research and studies in order to develop new or improved processes and plant designs to the point where they can be demonstrated on a large and practical scale;

108(a)

"(1) For the purpose of establishing national primary and secondary ambient air quality standards, the Administrator shall within 30 days after the date of enactment of the Clean Air

Amendments of 1970 publish, and shall from time to time thereafter revise, a list which includes each air pollutant—

- "(A) which in his judgment has an adverse effect on public health and welfare;
- "(B) the presence of which in the ambient air results from numerous or diverse mobile or stationary sources; and
- "(C) for which air quality criteria had not been issued before the date of enactment of the Clean Air Amendments of 1970, but for which he plans to issue air quality criteria under this section.
- "(2) The Administrator shall issue air quality criteria for an air pollutant within 12 months after he has included such pollutant in a list under paragraph (1). Air quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities. The criteria for an air pollutant, to the extent practicable, shall include information on—
 - "(A) those variable factors (including atmospheric conditions) which of themselves or in combination with other factors may alter the effects on public health or welfare of such air pollutant;
 - "(B) the types of air pollutants which, when present in the atmosphere, may interact with such pollutant to produce an adverse effect on public health or welfare; and
 - "(C) any known or anticipated adverse effects on welfare."

111(b)(1)(A)

"The Administrator shall, within 90 days after the date of enactment of the Clean Air Amendments of 1970, publish (and from time to time thereafter shall revise) a list of categories of stationary sources. He shall include a category of sources in such list if he determines it may contribute significantly to air pollution which causes or contributes to the endangerment of public health or welfare.

112(b)(1)(A)

"The Administrator shall, within 90 days after the date of enactment of the Clean Air Amendments of 1970, publish (and shall from time to time thereafter revise) a list which includes each hazardous air pollutant for which he intends to establish an emission standard under this section.

113(a)

- "(1) Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of any requirement of an applicable implementation plan, the Administrator shall notify the person in violation of the plan and the State in which the plan applies of such finding. If such violation extends beyond the 30th day after the date of the Administrator's notification, the Administrator may issue an order requiring such person to comply with the requirements of such plan or he may bring a civil action in accordance with subsection (b).
- "(2) Whenever, on the basis of information available to him, the Administrator finds that violations of an applicable implementation plan are so widespread that such violations appear to result from a failure of the State in which the plan applies to enforce the plan effectively, he shall so notify the State. If the Administrator finds such failure extends beyond the thirtieth day after such notice, he shall give public notice of such finding, (A) during the period beginning with such public notice and ending when such State satisfies the Administrator that it will enforce such plan (hereafter referred to in this section as 'period of Federally assumed enforcement') (B) the Administrator may enforce any requirement of such plan with respect to any person—
 - "(A) by issuing an order to comply with such requirement, or
 - "(B) by bringing a civil action under subsection (b).

"(3) Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of section 111(e) (relating to new source performance standards) or 112(c) (relating to standards for hazardous emissions), or is in violation of any requirement of section 114 (relating to inspections, etc.), he may issue an order requiring such person to comply with such section or requirement, or he may bring a civil action in accordance with subsection (b).

114(a)

"For the purpose (i) of developing or assisting in the development of any implementation plan under section 110 or 111(d), any standard of performance under section 111, or any emission standard under section 112; (ii) of determining whether any person is in violation of any such standard or any requirement of such a plan, or (iii) carrying out section 303—

"(1) the Administrator may require the owner or operator of any emission source to (A) establish and maintain such records, (B) make such reports, (C) install, use, and maintain such monitoring equipment or methods, (D) sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (E) provide such other information, as he may reasonably require; and

"(2) the Administrator or his authorized representative, upon presentation of his credentials—

"(A) shall have a right of entry to, upon, or through any premises in which an emission source is located or in which any records required to be maintained under paragraph (1) of this section are located, and

"(B) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required under paragraph (1), and sample any emissions which the owner or operator of such source is required to sample under paragraph (1).

115(b)(3)

"The Administrator may, after consultation with State officials of all affected States, also call such a conference whenever, on the basis of reports, surveys, or studies, he has reason to believe that any pollution referred to in subsection (a) is occurring and is endangering the health and welfare of persons in a State other than that in which the discharge or discharges originate. The Administrator shall invite the cooperation of any municipal, State, or interstate air pollution control agencies having jurisdiction in the affected area on any surveys or studies forming the basis of conference action.

115(j)

"(1) In connection with any conference called under this section, the Administrator is authorized to require any person whose activities result in the emission of air pollutants causing or contributing to air pollution to file with him, in such form as he may prescribe, a report, based on existing data, furnishing to the Administrator such information as may reasonably be required as to the character, kind, and quantity of pollutants discharged and the use of devices or other means to prevent or reduce the emission of pollutants by the person filing such a report. After a conference has been held with respect to any such pollution the Administrator shall require such reports from the person whose activities result in such pollution only to the extent recommended by such conference. Such report shall be made under oath or otherwise, as the Administrator may prescribe, and shall be filed with the Administrator within such reasonable period as the Administrator may prescribe, unless additional time be granted by the Administrator. No person shall be required in such report to divulge trade secrets or secret processes and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code.

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"Each department, agency, and instrumentality of the executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge of air pollutants, shall comply with Federal, State, interstate, and local requirements respecting control and abatement of air pollution to the same extent that any person is subject to such requirements.

206(a)

- "(1) The Administrator shall test, or require to be tested in such manner as he deems appropriate, any new motor vehicle or new motor vehicle engine submitted by a manufacturer to determine whether such vehicle or engine conforms with the regulations prescribed under section 202 of this Act. If such vehicle or engine conforms to such regulations, the Administrator shall issue a certificate of conformity upon such terms, and for such period (not in excess of one year), as he may prescribe.
- "(2) The Administrator shall test any emission control system incorporated in a motor vehicle or motor vehicle engine submitted to him by any person, in order to determine whether such system enables such vehicle or engine to conform to the standards required to be prescribed under section 202(b) of this Act. If the Administrator finds on the basis of such tests that such vehicle or engine conforms to such standards, the Administrator shall issue a verification of compliance with emission standards for such system when incorporated in vehicles of a class of which the tested vehicle is representative. He shall inform manufacturers and the National Academy of Sciences, and make available to the public, the results of such tests. Tests under this paragraph shall be conducted under such terms and conditions (including requirements for preliminary testing by qualified independent laboratories) as the Administrator may prescribe by regulations.

206(b)(1)

"In order to determine whether new motor vehicles or new motor vehicle engines being manufactured by a manufacturer do in fact conform with the regulations with respect to which the certificate of conformity was issued, the Administrator is authorized to test such vehicles or engines. Such tests may be conducted by the Administrator directly or, in accordance with conditions specified by the Administrator, by the manufacturer.

206(c)

"For purposes of enforcement of this section, officers or employees duly designated by the Administrator, upon presenting appropriate credentials to the manufacturer or person in charge, are authorized (1) to enter, at reasonable times, any plant or other establishment of such manufacturers, for the purpose of conducting tests of vehicles or engines in the hands of the manufacturer,

or (2) to inspect at reasonable times, records, files, papers, processes, controls, and facilities used by such manufacturer in conducting tests under regulations of the Administrator. Each such inspection shall be commenced and completed with reasonable promptness.

206(d)

"The Administrator shall by regulation establish methods and procedures for making tests under this section.

207(c)

"Effective with respect to vehicles and engines manufactured during model years beginning more than 60 days after the date of enactment of the Clean Air Amendments of 1970—

"(1) If the Administrator determines that a substantial number of any class or category of vehicles or engines, although properly maintained and used, do not conform to the regulations prescribed under section 202, when in actual use throughout their useful life (as determined under section 202(d)), he shall immediately notify the manufacturer thereof of such nonconformity, and he shall require the manufacturer to submit a plan for remedying the nonconformity of the vehicles or engines with respect to which such notification is given.

208(a)

"Every manufacturer shall establish and maintain such records, make such reports, and provide such information as the Administrator may reasonably require to enable him to determine whether such manufacturer has acted or is acting in compliance with this part and regulations thereunder and shall, upon request of an officer or employee duly designated by the Administrator, permit such officer or employee at reasonable times to have access to and copy such records.

211(a)

"The Administrator may by regulation designate any fuel or fuel additive and, after such date or dates as may be prescribed by him, no manufacturer or processor of any such fuel or additive may sell, offer for sale, or introduce into commerce such fuel or additive unless the Administrator has registered such fuel or additive in accordance with subsection (b) of this section.

211(b)

"(1) For the purpose of registration of fuels and fuel additives, the Administrator shall require—

- "(A) the manufacturer of any fuel to notify him as to the commercial identifying name and manufacturer of any additive contained in such fuel; the range of concentration of any additive in the fuel; and the purpose-in-use of any such additive; and
- "(B) the manufacturer of any additive to notify him as to the chemical composition of such additive.
- "(2) For the purpose of registration of fuels and fuel additives, the Administrator may also require the manufacturer of any fuel or fuel additive—
 - "(A) to conduct tests to determine potential public health effects of such fuel or additive (including, but not limited to, carcinogenic, teratogenic, or mutagenic effects), and
 - "(B) to furnish the description of any analytical technique that can be used to detect and measure any additive in such fuel, the recommended range of concentration of such additive, and the recommended purpose-in-use of such additive, and such other information as is reasonable and necessary to determine the emissions resulting from the use of the fuel or additive contained in such fuel, the effect of such fuel or additive on the emission control performance of any vehicle or vehicle engine, or the extent to which such emissions affect the public health or welfare.

Tests under subparagraph (A) shall be conducted in conformity with test procedures and protocols established by the Administrator. The result of such tests shall not be considered confidential.

212(d)(3)(D)

"The Administrator and the Board shall conduct whatever investigation is necessary, including actual inspection of the vehicle at a place designated in regulations prescribed under subparagraph (A).

212(h)

"The Administrator shall, from time to time as the Board deems appropriate, test the emissions from certified low-emission vehicles purchased by the Federal Government.

231(a)

- "(1) Within 90 days after the date of enactment of the Clean Air Amendments of 1970, the Administrator shall commence a study and investigation of emissions of air pollutants from aircraft in order to determine—
 - "(A) the extent to which such emissions affect air quality in air quality control regions throughout the United States, and
 - "(B) the technological feasibility of controlling such emissions.

311(b)

"The Administrator and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access for the purpose of audit and examinations to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act.

WATER QUALITY-RELATED STATUTORY AUTHORITY

FEDERAL WATER POLLUTION CONTROL ACT, as amended

(33 U.S.C. 1251 et seq)

104(a)

"The Administrator shall establish national programs for the prevention, reduction, and elimination of pollution and as part of such programs shall—

- "(1) in cooperation with other Federal, State, and local agencies, conduct and promote the coordination and acceleration of, research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of pollution;
- "(5) in cooperation with the States, and their political subdivisions, and other Federal agencies establish, equip, and maintain a water quality surveillance system for the purpose of monitoring the quality of the navigable waters and ground waters and the contiguous zone and the oceans and the Administrator shall, to the extent practicable, conduct such surveillance by utilizing the resources of the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Geological Survey, and the Coast Guard, and shall report on such quality in the report required under subsection (a) of section 516:

104(b)

"In carrying out the provisions of subsection (a) of this section the Administrator is authorized to—

- "(6) collect and disseminate, in cooperation with other Federal departments and agencies, and with other public or private agencies, institutions, and organizations having related responsibilities, basic data on chemical, physical, and biological effects of varying water quality and other information pertaining to pollution and the prevention, reduction, and elimination thereof: and
- "(7) develop effective and practical processes, methods, and prototype devices for the prevention, reduction, and elimination of pollution.

104(c)

"In carrying out the provisions of subsection (a) of this section the Administrator shall conduct research on, and survey the results of other scientific studies on, the harmful effects on the health or welfare of persons caused by pollutants. In order to avoid duplication of effort, the Administrator shall, to the extent practicable, conduct such research in cooperation with and through the facilities of the Secretary of Health, Education, and Welfare.

104(d)

"In carrying out the provisions of this section the Administrator shall develop and demonstrate under varied conditions (including conducting such basic and applied research, studies, and experiments as may be necessary):

- s as may be necessary):

 "(1) Practicable means of treating municipal sewage, and other waterborne wastes to implement the requirements of section 201 of this Act;
- "(2) Improved methods and procedures to identify and measure the effects of pollutants, including those pollutants created by new technological developments; and
- "(3) Methods and procedures for evaluating the effects on water quality of augmented streamflows to control pollution not susceptible to other means of prevention, reduction, or elimination.

104(f)

"The Administrator shall conduct research and technical development work, and make studies, with respect to the quality of the waters of the Great Lakes, including an analysis of the present and projected future water quality of the Great Lakes under varying conditions of waste treatment and disposal, an evaluation of the water quality needs of those to be served by such waters, an evaluation of municipal, industrial, and vessel waste treatment and disposal practices with respect to such waters, and a study of alternate means of solving pollution problems (including additional waste treatment measures) with respect to such waters.

104(i)

"The Administrator, in cooperation with the Secretary of the department in which the Coast Guard is operating, shall—

"(1) engage in such research, studies, experiments, and demonstrations as he deems appropriate, relative to the removal of oil from any waters and to the prevention, control, and elimination of oil and hazardous substances pollution;

104(j)

"The Secretary of the department in which the Coast Guard is operating shall engage in such research, studies, experiments, and demonstrations as he deems appropriate relative to equipment which is to be installed on board a vessel and is designed to receive, retain, treat, or discharge human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes with particular emphasis on equipment to be installed on small recreational vessels. The Secretary of the department in which the Coast Guard is operating shall report to Congress the results of such research, studies, experiments, and demonstrations prior to the effective date of any regulations established under section 312 of this Act. In carrying out this subsection the Secretary of the department in which the Coast Guard is operating may enter into contracts with, or make grants to, public or private organizations and individuals.

104(m)(1)

"The Administrator shall, in an effort to prevent degradation of the environment from the disposal of waste oil, conduct a study of (A) the generation of used engine, machine, cooling, and similar waste oil, including quantities generated, the nature and quality of such oil, present collecting methods and disposal practices, and alternate uses of such oil; (B) the long-term, chronic biological effects of the disposal of such waste oil. In conducting such study, the Administrator shall consult with affected industries and other persons.

104(n)

- "(1) The Administrator shall, in cooperation with the Secretary of the Army, the Secretary of Agriculture, the Water Resources Council, and with other appropriate Federal, State, interstate, or local public bodies and private organizations, institutions, and individuals, conduct and promote, and encourage contributions to, continuing comprehensive studies of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, on sport and commercial fishing, on recreation, on water supply and water power, and on other beneficial purposes. Such studies shall also consider the effect of demographic trends, the exploitation of mineral resources and fossil fuels, land and industrial development, navigation, flood and erosion control, and other uses of estuaries and estuarine zones upon the pollution of the waters therein.
- "(2) In conducting such studies, the Administrator shall assemble, coordinate, and organize all existing pertinent information on the Nation's estuaries and estuarine zones; carry out a program of investigations and surveys to supplement existing information in representative estuaries and estuarine zones; and identify the problems and areas where further research and study are required.

104(o)(1)

"The Administrator shall conduct research and investigations on devices, systems, incentives, pricing policy, and other methods of reducing the total flow of sewage, including, but not limited to, unnecessary water consumption in order to reduce the requirements for, and the costs of, sewage and waste treatment services. Such research and investigations shall be directed to develop devices, systems, policies, and methods capable of achieving the maximum reduction of unnecessary water consumption.

104(p)

"In carrying out the provisions of subsection (a) of this section the Administrator shall, in cooperation with the Secretary of Agriculture, other Federal agencies, and the States, carry out a comprehensive study and research program to determine new and improved methods and the better application of existing methods of preventing, reducing, and eliminating pollution from agriculture, including the legal, economic, and other implications of the use of such methods.

104(q)

- "(1) The Administrator shall conduct a comprehensive program of research and investigation and pilot project implementation into new and improved methods of preventing, reducing, storing, collecting, treating, or otherwise eliminating pollution from sewage in rural and other areas where collection of sewage in conventional, community-wide sewage collection systems is impractical, uneconomical, or otherwise infeasible, or where soil conditions or other factors preclude the use of septic tank and drainage field systems.
- "(2) The Administrator shall conduct a comprehensive program of research and investigation and pilot project implementation into new and improved methods for the collection and treatment of sewage and other liquid wastes combined with the treatment and disposal of solid wastes.

104(t)

"The Administrator shall, in cooperation with State and Federal agencies and public and private organizations, conduct continuing comprehensive studies of the effects and methods of control of thermal discharges. In evaluating alternative methods of control the studies shall consider (1) such data as are available on the latest available technology, economic feasibility including cost-effectiveness analysis, and (2) the total impact on the environment, considering not only water quality but also air quality, land use, and effective utilization and conservation of fresh water and other natural resources. Such studies shall consider methods of minimizing adverse effects and maximizing beneficial effects of thermal discharges. The results of these studies shall be reported

by the Administrator as soon as practicable, but not later than 270 days after enactment of this subsection, and shall be made available to the public and the States, and considered as they become available by the Administrator in carrying out section 316 of this Act and by the States in proposing thermal water quality standards.

105(a)

"The Administrator is authorized to conduct in the Environmental Protection Agency, and to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of—

- "(1) any project which will demonstrate a new or improved method of preventing, reducing, and eliminating the discharge into any waters of pollutants from sewers which carry storm water or both storm water and pollutants; or
- "(2) any project which will demonstrate advanced waste treatment and water purification methods (including the temporary use of new or improved chemical additives which provide substantial immediate improvement to existing treatment processes), or new or improved methods of joint treatment systems for municipal and industrial wastes;

and to include in such grants such amounts as are necessary for the purpose of reports, plans, and specifications in connection therewith.

105(d)

"In carrying out the provisions of this section, the Administrator shall conduct, on a priority basis, an accelerated effort to develop, refine, and achieve practical application of:

- "(1) waste management methods applicable to point and nonpoint sources of pollutants to eliminate the discharge of pollutants, including, but not limited to, elimination of runoff of pollutants and the effects of pollutants from inplace or accumulated sources;
- "(2) advanced waste treatment methods applicable to point and nonpoint sources, including inplace or accumulated sources of pollutants, and methods for reclaiming and recycling water and confining pollutants so they will not migrate to cause water or other environmental pollution; and
- "(3) improved methods and procedures to identify and measure the effects of pollutants on the chemical, physical, and biological integrity of water, including those pollutants created by new technological developments.

"Beginning in fiscal year 1974 the Administrator shall not make any grant under this section to any State which has not provided or is not carrying out as a part of its program---

"(1) the establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, and to compile and analyze data on (including classification according to eutrophic condition), the quality of navigable waters and to the extent practicable, ground waters including biological monitoring; (and provision for annually updating such data and including it in

the report required under section 305 of this Act)

"The Administrator in cooperation with the Appalachian Regional Commission and other Federal agencies is authorized to conduct, to make grants for, or to contract for, projects to demonstrate comprehensive approaches to the elimination or control of acid or other mine water pollution resulting from active or abandoned mining operations and other environmental pollution affecting water quality within all or part of a watershed or river basin, including siltation from surface mining. Such projects shall demonstrate the engineering and economic feasibility and practicality of various abatement techniques which will contribute substantially to effective and practical methods of acid or other mine water pollution elimination or control, and other pollution affecting water quality, including techniques that demonstrate the engineering and economic feasibility and practicality of using sewage sludge materials and other municipal wastes to diminish or prevent pollution affecting water quality from acid, sedimentation, or other pollutants and in such projects to restore affected lands to usefulness for forestry, agriculture, recreation, or other beneficial purposes.

108(a)

"The Administrator, in cooperation with other Federal departments, agencies, and instrumentalities is authorized to enter into agreements with any State, political subdivision, interstate agency, or other public agency, or combination thereof, to carry out one or more projects to demonstrate new methods and techniques and to develop preliminary plans for the elimination or control of pollution, within all or any part of the watersheds of the Great Lakes. Such projects shall demonstrate the engineering and economic feasibility and practicality of removal of pollutants and prevention of any polluting matter from entering into the Great Lakes in the future and other reduction and remedial techniques which will contribute substantially to effective and practical methods of pollution prevention, reduction, or elimination.

106(e)

107(a)

113(a)

"The Administrator is authorized to enter into agreements with the State of Alaska to carry out one or more projects to demonstrate methods to provide for central community facilities for safe water and elimination or control of pollution in those native villages of Alaska without such facilities. Such project shall include provisions for community safe water supply systems, toilets, bathing and laundry facilities, sewage disposal facilities, and other similar facilities, and educational and informational facilities and programs relating to health and hygiene. Such demonstration projects shall be for the further purpose of developing preliminary plans for providing such safe water and such elimination or control of pollution for all native villages in such State.

115

"The Administrator is directed to identify the location of in-place pollutants with emphasis on toxic pollutants in harbors and navigable waterways and is authorized, acting through the Secretary of the Army, to make contracts for the removal and appropriate disposal of such materials from critical port and harbor areas. There is authorized to be appropriated \$15,000,000 to carry out the provisions of this section, which sum shall be available until expended.

210

"The Administrator shall annually make a survey to determine the efficiency of the operation and maintenance of treatment works constructed with grants made under this Act, as compared to the efficiency planned at the time the grant was made. The results of such annual survey shall be included in the report required under section 516(a) of this Act.

302(a)

"Whenever, in the judgment of the Administrator, discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 301 (b)(2) of this Act, would interfere with the attainment or maintenance of that water quality in a specific portion of the navigable waters which shall assure protection of public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water, effluent limitations (including alternative effluent control strategies) for such point source or sources shall be established which can reasonably be expected to contribute to the attainment or maintenance of such water quality.

304(a)

- "(1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) criteria for water quality accurately reflecting the latest scientific knowledge (A) on the kind and extent of all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water, including ground water; (B) on the concentration and dispersal of pollutants, or their byproducts, through biological, physical, and chemical processes; and (C) on the effects of pollutants on biological community diversity, productivity, and stability, including information on the factors affecting rates of eutrophication and rates of organic and inorganic sedimentation for varying types of receiving waters.
- "(2) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) information (A) on the factors necessary to restore and maintain the chemical, physical, and biological integrity of all navigable waters, ground waters, waters of the contiguous zone, and the oceans; (B) on the factors necessary for the protection and propagation of shellfish, fish, and wildlife for classes and categories of receiving waters and to allow recreational activities in and on the water; and (C) on the measurement and classification of water quality; and (D) for the purpose of section 303, on and the identification of pollutants suitable for maximum daily load measurement correlated with the achievement of water quality objectives.

304(b)

"For the purpose of adopting or revising effluent limitations under this Act the Administrator shall, after consultation with appropriate Federal and State agencies and other interested persons, publish within one year of enactment of this title, regulations, providing guidelines for effluent limitations, and, at least annually thereafter, revise, if appropriate, such regulations. Such regulations shall—

- "(1)(A) identify, in terms of amounts of constitutents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best practicable control technology currently available for classes and categories of point sources (other than publicly owned treatment works); and
- "(B) specify factors to be taken into account in determining the control measures and practices to be applicable to point sources (other than publicly owned treatment works)

within such categories or classes. Factors relating to the assessment of best practicable control technology currently available to comply with subsection (b)(1) of section 301 of this Act shall include consideration of the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, and shall also take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate;

- "(2)(A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods, and other alternatives for classes and categories of point sources (other than publicly owned treatment works); and
- "(B) specify factors to be taken into account in determining the best measures and practices available to comply with subsection (b)(2) of section 301 of this Act to be applicable to any point source (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best available technology shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate; and
- "(3) identify control measures and practices available to eliminate the discharge of pollutants from categories and classes of point sources, taking into account the cost of achieving such elimination of the discharge of pollutants.

"The Administrator, after consultation, with appropriate Federal and State agencies and other interested persons, shall issue to the States and appropriate water pollution control agencies within 270 days after enactment of this title (and from time to time thereafter) information on the processes, procedures, or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under section 306 of this Act. Such information shall include technical and other data, including costs, as are available on alternative methods of elimination or reduction of the discharge of pollutants. Such information, and revisions thereof, shall be published in the Federal Register and otherwise shall be made available to the public.

"The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall publish within sixty days after enactment of this title (and from time to time thereafter) information, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, on the degree of effluent reduction attainable through the application of secondary treatment.

"The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall issue to appropriate Federal agencies, the States, water pollution control agencies, and agencies designated under section 208 of this Act, within one year after the effective date of this subsection (and from time to time thereafter) information including (1) guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants, and (2) processes, procedures, and methods to control pollution resulting from—

- "(A) agricultural and silvicultural activities, including runoff from fields and crop and forest lands:
- "(B) mining activities, including runoff and siltation from new, currently operating, and abandoned surface and underground mines;
- "(C) all construction activity, including runoff from the facilities resulting from such construction;
 - "(D) the disposal of pollutants in wells or in subsurface excavations;
- "(E) salt water intrusion resulting from reductions of fresh water flow from any cause, including extraction of ground water, irrigation, obstruction, and diversion; and
- "(F) changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels, causeways, or flow diversion facilities.

Such information and revisions thereof shall be published in the Federal Register and otherwise made available to the public.

304(c)

304(d)(1)

304(e)

304(f)(1)

"For the purpose of assisting States in carrying out programs under section 402 of this Act, the Administrator shall publish, within one hundred and twenty days after the date of enactment of this title, and review at least annually thereafter and, if appropriate, revise guidelines for pretreatment of pollutants which he determines are not susceptible to treatment by publicly owned treatment works. Guidelines under this subsection shall be established to control and prevent the discharge into the navigable waters, the contiguous zone, or the ocean (either directly or through publicly owned treatment works) of any pollutant which interferes with, passes through, or otherwise is incompatible with such works.

304(g)

"The Administrator shall, within one hundred and eighty days from the date of enactment of this title, promulgate guidelines establishing test procedures for the analysis of pollutants that shall include the factors which must be provided in any certification pursuant to section 401 of this Act or permit application pursuant to section 402 of this Act.

304(h)

"The Administrator shall (1) within sixty days after the enactment of this title promulgate guidelines for the purpose of establishing uniform application forms and other minimum requirements for the acquisition of information from owners and operators of point sources of discharge subject to any State program under section 402 of this Act, and (2) within sixty days from the date of enactment of this title promulgate guidelines establishing the minimum procedural and other elements of any State program under section 402 of this Act which shall include:

"(A) monitoring requirements;

"(B) reporting requirements (including procedures to make information available to the public);

"(C) enforcement provisions; and

"(D) funding, personnel qualifications, and manpower requirements (including a requirement that no board or body which approves permit applications or portions thereof shall include, as a member, any person who receives, or has during the previous two years received, a significant portion of his income directly or indirectly from permit holders or applicants for a permit).

304(i)

"The Administrator shall, within 270 days after the effective date of this subsection (and from time to time thereafter), issue such information on methods, procedures, and processes as may be appropriate to restore and enhance the quality of the Nation's publicly owned fresh water lakes.

305(a)

"The Administrator, in cooperation with the States and with the assistance of appropriate Federal agencies, shall prepare a report to be submitted to the Congress on or before January 1, 1974, which shall—

- "(1) describe the specific quality, during 1973, with appropriate supplemental descriptions as shall be required to take into account seasonal, tidal, and other variations, of all navigable waters and the waters of the contiguous zone;
- "(2) include an inventory of all point sources of discharge (based on a qualitative and quantitative analysis of discharges) of pollutants, into all navigable waters and the waters of the contiguous zone; and

"(3) identify specifically those navigable waters, the quality of which—

"(A) is adequate to provide for the protection and propagation of a balanced popution of shellfish, fish, and wildlife and allow recreational activities in and on the water;

"(B) can reasonably be expected to attain such level by 1977 or 1983; and

"(C) can reasonably be expected to attain such level by any later date.

306(b)(B)

"As soon as practicable, but in no case more than one year, after a category of sources is included in a list under subparagraph (A) of this paragraph, the Administrator shall propose and publish regulations establishing Federal standards of performance for new sources within such category. The Administrator shall afford interested persons an opportunity for written comment on such proposed regulations. After considering such comments, he shall promulgate, within one hundred and twenty days after publication of such proposed regulations, such standards with such adjustments as he deems appropriate. The Administrator shall, from time to time, as technology and alternatives change, revise such standards following the procedure required by this subsection for promulgation of such standards. Standards of performance, or revisions thereof, shall become effective upon promulgation. In establishing or revising Federal standards of performance for new sources under this section, the Administrator shall take into consideration the cost of achieving such effluent reduction, and any non-water quality environmental impact and energy requirements.

307(a)(1)

"The Administrator shall, within ninety days after the date of enactment of this title, publish (and from time to time thereafter revise) a list which includes any toxic pollutant or combination

of such pollutants for which an effluent standard (which may include a prohibition of the discharge of such pollutants or combination of such pollutants) will be established under this section. The Administrator in publishing such list shall take into account the toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms and the nature and extent of the effect of the toxic pollutant on such organisms.

307(b)(1)

"The Administrator shall, within one hundred and eighty days after the date of enactment of this title and from time to time thereafter, publish proposed regulations establishing pretreatment standards for introduction of pollutants into treatment works (as defined in section 212 of this Act) which are publicly owned for those pollutants which are determined not to be susceptible to treatment by such treatment works or which would interfere with the operation of such treatment works. Not later than ninety days after such publication, and after opportunity for public hearing, the Administrator shall promulgate such pretreatment standards. Pretreatment standards under this subsection shall specify a time for compliance not to exceed three years from the date of promulgation and shall be established to prevent the discharge of any pollutant through treatment works (as defined in section 212 of this Act) which are publicly owned, which pollutant interferes with, passes through, or otherwise is incompatible with such works.

308(a)

309(a)

"Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, and 504 of this Act:—

"(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such

other information as he may reasonably require;

"(1) Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of any condition or limitation which implements section 301, 302, 306, 307, or 308 of this Act in a permit issued by a State under an approved permit program under section 402 of this Act, he shall proceed under his authority in paragraph (3) of this subsection or he shall notify the person in alleged violation and such State of such finding. If beyond the thirtieth day after the Administrator's notification the State has not commenced appropriate enforcement action, the Administrator shall issue an order requiring such person to comply with such condition or limitation or shall bring a civil action in accordance with subsection (b) of this section.

- "(2) Whenever, on the basis of information available to him, the Administrator finds that violations of permit conditions or limitations as set forth in paragraph (1) of this subsection are so widespread that such violations appear to result from a failure of the State to enforce such permit conditions or limitations effectively, he shall so notify the State. If the Administrator finds such failure extends beyond the thirtieth day after such notice, he shall give public notice of such finding. During the period beginning with such public notice and ending when such State satisfies the Administrator that it will enforce such conditions and limitations (hereafter referred to in this section as the period of 'federally assumed enforcement'), the Administrator shall enforce any permit condition or limitation with respect to any person—
 - "(A) by issuing an order to comply with such condition or limitation, or
 - "(B) by bringing a civil action under subsection (b) of this section.
- "(3) Whenever on the basis of any information available to him the Administrator finds that any person is in violation of section 301, 302, 306, 307, or 308 of this Act, or is in violation of any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by him or by a State, he shall issue an order requiring such person to comply with such section or requirement, or he shall bring a civil action in accordance with subsection (b) of this section.

311(b)(2)

"(A) The Administrator shall develop, promulgate, and revise as may be appropriate, regulations designating as hazardous substances, other than oil as defined in this section, such elements and compounds which, when discharged in any quantity into or upon the navigable waters of the

United States or adjoining shorelines or the waters of the contiguous zone, present an imminent and substantial danger to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches.

"(B)(i) The Administrator shall include in any designation under subparagraph (A) of this subsection a determination whether any such designated hazardous substance can actually be removed.

"Within sixty days after the effective date of this section, the President shall prepare and publish a National Contingency Plan for removal of oil and hazardous substances, pursuant to this subsection. Such National Contingency Plan shall provide for efficient, coordinated, and effective action to minimize damage from oil and hazardous substance discharges, including containment, dispersal, and removal of oil and hazardous substances, and shall include, but not be limited to——

"(D) a system of surveillance and notice designed to insure earliest possible notice of discharges of oil and hazardous substances to the appropriate Federal agency;

"(G) a schedule, prepared in cooperation with the States, identifying (i) dispersants and other chemicals, if any, that may be used in carrying out the Plan, (ii) the waters in which such dispersants and chemicals may be used, and (iii) the quantities of such dispersant or chemical which can be used safely in such waters, which schedule shall provide in the case of any dispersant, chemical, or waters not specifically identified in such schedule that the President, or his delegate, may, on a case-by-case basis, identify the dispersants and other chemicals which may be used, the waters in which they may be used, and the quantities which can be used safely in such waters; and

311(j)(1)

311(c)(2)

"Consistent with the National Contingency Plan required by subsection (c)(2) of this section, as soon as practicable after the effective date of this section, and from time to time thereafter, the President shall issue regulations consistent with maritime safety and with marine and navigation laws (A) establishing methods and procedures for removal of discharged oil and hazardous substances, (B) establishing criteria for the development and implementation of local and regional oil and hazardous substance removal contingency plans, (C) establishing procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil and hazardous substances from vessels and from onshore facilities and offshore facilities, and to contain such discharges, and (D) governing the inspection of vessels carrying cargoes of oil and hazardous substances and the inspection of such cargoes in order to reduce the likelihood of discharges of oil from vessels in violation of this section.

311(m)

"Anyone authorized by the President to enforce the provisions of this section may, except as to public vessels, (A) board and inspect any vessel upon the navigable waters of the United States or the waters of the contiguous zone, (B) with or without a warrant arrest any person who violates the provisions of this section or any regulation issued thereunder in his presence or view, and (C) execute any warrant or other process issued by an officer or court of competent jurisdiction.

312(b)(1)

"As soon as possible, after the enactment of this section and subject to the provisions of section 104(j) of this Act, the Administrator, after consultation with the Secretary of the department in which the Coast Guard is operating, after giving appropriate consideration to the economic costs involved, and within the limits of available technology, shall promulgate Federal standards of performance for marine sanitation devices (hereafter in this section referred to as 'standards') which shall be designed to prevent the discharge of untreated or inadequately treated sewage into or upon the navigable waters from new vessels and existing vessels, except vessels not equipped with installed toilet facilities. Such standards shall be consistent with maritime safety and the marine and navigation laws and regulations and shall be coordinated with the regulations issued under this subsection by the Secretary of the department in which the Coast Guard is operating. The Secretary of the department in which the Coast Guard is operating shall promulgate regulations, which are consistent with standards promulgated under this subsection and with maritime safety and the marine and navigation laws and regulations governing the design, construction, installation, and operation of any marine sanitation device on board such vessels.

403(c)

- "(1) The Administrator shall, within one hundred and eighty days after enactment of this Act (and from time to time thereafter), promulgate guidelines for determining the degradation of the waters of the territorial seas, the contiguous zone, and the oceans, which shall include:
 - "(A) the effect of disposal of pollutants on human health or welfare, including but not limited to plankton, fish, shellfish, wildlife, shorelines, and beaches;
 - "(B) the effect of disposal of pollutants on marine life including the transfer, concentration, and dispersal of pollutants or their byproducts through biological, physical, and

chemical processes; changes in marine ecosystem diversity, productivity, and stability; and species and community population changes;

- "(C) the effect of disposal, of pollutants on esthetic, recreation, and economic values;
- "(D) the persistence and permanence of the effects of disposal of pollutants;
- "(E) the effect of the disposal at varying rates, of particular volumes and concentrations of pollutants;
- "(F) other possible locations and methods of disposal or recycling of pollutants including land-based alternatives; and
- "(G) the effect on alternate uses of the oceans, such as mineral exploitation and scientific study.

MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT

(33 U.S.C. 1401 et seq)

102(a)

Except in relation to dredged material, as provided for in section 103 of this title, and in relation to radiological, chemical, and biological warfare agents and high-level radioactive waste, as provided for in section 101 of this title, the Administrator may issue permits, after notice and opportunity for public hearings, for the transportation from the United States or, in the case of an agency or instrumentality of the United States, for the transportation from a location outside the United States, of material for the purpose of dumping it into ocean waters, or for the dumping of material into the waters described in section 101(b), where the Administrator determines that such dumping will not unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. The Administrator shall establish and apply criteria for reviewing and evaluating such permit applications, and, in establishing or revising such criteria, shall consider, but not be limited in his consideration to, the following:

- (A) The need for the proposed dumping.
- (B) The effect of such dumping on human health and welfare, including economic, esthetic, and recreational values.
- (C) The effect of such dumping on fisheries resources, plankton, fish, shellfish, wildlife, shore lines and beaches.
 - (D) The effect of such dumping on marine ecosystems, particularly with respect to—
 - (i) the transfer, concentration, and dispersion of such material and its byproducts through biological, physical, and chemical processes.
 - (ii) potential changes in marine ecosystem diversity, productivity, and stability, and (iii) species and community population dynamics.
 - (E) The persistence and permanence of the effects of the dumping.
 - (F) The effect of dumping particular volumes and concentrations of such materials.
- (G) Appropriate locations and methods of disposal or recycling, including land-based alternatives and the probable impact of requiring use of such alternate locations or methods upon considerations affecting the public interest.
- (H) The effect of alternate uses of oceans, such as scientific study, fishing, and other living resource exploitation, and nonliving resource exploitation.
- (1) In designating recommended sites, the Administrator shall utilize wherever feasible locations beyond the edge of the Continental Shelf.

In establishing or revising such criteria, the Administrator shall consult with Federal, State, and local officials, and interested members of the general public, as may appear appropriate to the Administrator. With respect to such criteria as may affect the civil works program of the Department of the Army, the Administrator shall also consult with the Secretary. In reviewing applications for permits, the Administrator shall make such provision for consultation with interested Federal and State agencies as he deems useful or necessary. No permit shall be issued for a dumping of material which will violate applicable water quality standards.

102(b)

The Administrator may establish and issue various categories of permits, including the general permits described in section 104(c).

102(c)

The Administrator may, considering the criteria established pursuant to subsection (a) of this section, designate recommended sites or times for dumping and, when he finds it necessary to protect critical areas, shall, after consultation with the Secretary, also designate sites or times within which certain materials may not be dumped.

- (d) No permit is required under this title for the transportation for dumping or the dumping of fish wastes, except when deposited in harbors or other protected or enclosed coastal waters, or where the Administrator finds that such deposits could endanger health, the environment, or ecological systems in a specific location. Where the Administrator makes such a finding, such material may be deposited only as authorized by a permit issued by the Administrator under this section.
- If, in any case, the Secretary finds that, in the disposition of dredged material, there is no economically feasible method or site available other than a dumping site the utilization of which would result in non-compliance with the criteria established pursuant to section 102(a) relating to

103(d)

the effects of dumping or with the restrictions established pursuant to section 102(c) relating to critical areas, he shall so certify and request a waiver from the Administrator of the specific requirements involved. Within thirty days of the receipt of the waiver request, unless the Administrator finds that the dumping of the material will result in an unacceptably adverse impact on municipal water supplies, shell-fish beds, wildlife, fisheries (including spawning and breeding areas), or recreational areas, he shall grant the waiver.

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- (a) Permits issued under this title shall designate and include (1) the type of material authorized to be transported for dumping or to be dumped; (2) the amount of material authorized to be transported for dumping or to be dumped; (3) the location where such transport for dumping will be terminated or where such dumping will occur; (4) the length of time for which the permits are valid and their expiration date; (5) any special provisions deemed necessary by the Administrator or the Secretary, as the case may be, after consultation with the Secretary of the Department in which the Coast Guard is operating, for the monitoring and surveillance of the transportation or dumping; and (6) such other matters as the Administrator or the Secretary, as the case may be, deems appropriate.
- (b) The Administrator or the Secretary, as the case may be, may prescribe such processing fees for permits and such reporting requirements for actions taken pursuant to permits issued by him under this title as he deems appropriate.
- (c) Consistent with the requirements of sections 102 and 103, but in lieu of a requirement for specific permits in such case, the Administrator or the Secretary, as the case may be, may issue general permits for the transportation for dumping, or dumping, or both, of specified materials or classes of materials for which he may issue permits, which he determines will have a minimal adverse environmental impact.
- (d) Any permit issued under this title shall be reviewed periodically and, if appropriate, revised. The Administrator or the Secretary, as the case may be, may limit or deny the issuance of permits, or he may alter or revoke partially or entirely the terms of permits issued by him under this title, for the transportation for dumping, or for the dumping, or both, of specified materials or classes of materials, where he finds that such materials cannot be dumped consistently with the criteria and other factors required to be applied in evaluating the permit application. No action shall be taken under this subsection unless the affected person or permittee shall have been given notice and opportunity for a hearing on such action as proposed.
- (e) The Administrator or the Secretary, as the case may be, shall require an applicant for a permit under this title to provide such information as he may consider necessary to review and evaluate such application.

201

The Secretary of Commerce, in coordination with the Secretary of the Department in which the Coast Guard is operating and with the Administrator shall, within six months of the enactment of this Act, initiate a comprehensive and continuing program of monitoring and research regarding the effects of the dumping of material into ocean waters or other coastal waters where the tide ebbs and flows or into the Great Lakes or their connecting waters and shall report from time to time, not less frequently than annually, his findings (including an evaluation of the short-term ecological effects and the social and economic factors involved) to the Congress.

202(a)

The Secretary of Commerce, in consultation with other appropriate Federal departments, agencies, and instrumentalities shall, within six months of the enactment of this Act, initiate a comprehensive and continuing program of research with respect to the possible long-range effects of pollution, overfishing, and man-induced changes of ocean ecosystems. In carrying out such research, the Secretary of Commerce shall take into account such factors as existing and proposed international policies affecting oceanic problems, economic considerations involved in both the protection and the use of the oceans, possible alternatives to existing programs, and ways in which the health of the oceans may best be preserved for the benefit of succeeding generations of mankind.

203

The Secretary of Commerce shall conduct and encourage, cooperate with, and render financial and other assistance to appropriate public (whether Federal, State, interstate, or local) authorities, agencies, and institutions, private agencies and institutions, and individuals in the conduct of, and to promote the coordination of, research, investigations, experiments, training, demonstrations, surveys, and studies for the purpose of determining means of minimizing or ending all dumping of materials within five years of the effective date of this Act.

FISH AND WILDLIFE ACT, as amended

(16 U.S.C. 665)

665

The Secretary of the Interior, through the Fish and Wildlife Service and the Bureau of Mines, is authorized to make such investigations as he deems necessary to determine the effects of domestic sewage, mine, petroleum, and industrial wastes, erosion silt, and other polluting substances on wildlife, and to make reports to the Congress concerning such investigations and of recommendations for alleviating dangerous and undesirable effects of such pollution. These investigations shall include (1) the determination of standards of water quality for the maintenance of wildlife; (2) the study of methods of abating and preventing pollution, including methods for the recovery of useful or marketable products and byproducts of wastes; and (3) the collation and distribution of data on the progress and results of such investigations for the use of Federal, State, municipal, and private agencies, individuals, organizations, or enterprises. Mar. 10, 1934, c. 55, § 5.

WATER SUPPLY-RELATED STATUTORY AUTHORITY

PUBLIC HEALTH SERVICE ACT

(42 U.S.C. 264)

361(a)

The Surgeon General, with the approval of the Secretary* is authorized to make and enforce such regulations as in his judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession. For purposes of carrying out and enforcing such regulations, the Surgeon General may provide for such inspection, fumigation, disinfection, sanitation, pest extermination, destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings, and other measures, as in his judgment may be necessary.

^{*}These responsibilities are now with the Administrator of EPA.

SOLID WASTE-RELATED STATUTORY AUTHORITY

SOLID WASTE DISPOSAL ACT

(42 U.S.C. 3251 et seq)

RESEARCH, DEMONSTRATIONS, TRAINING, AND OTHER ACTIVITIES

204(a)

The Secretary shall conduct, and encourage, cooperate with, and render financial and other assistance to appropriate public (whether Federal, State, interstate, or local) authorities, agencies, and institutions, private agencies and institutions, and individuals in the conduct of, and promote the coordination of, research, investigations, experiments, training, demonstrations, surveys, and studies relating to—

- (1) any adverse health and welfare effects of the release into the environment of material present in solid waste, and methods to eliminate such effects;
 - (2) the operation and financing of solid waste disposal programs;
 - (3) the reduction of the amount of such waste and unsalvageable waste materials;
- (4) the development and application of new and improved methods of collecting and disposing of solid waste and processing and recovering materials and energy from solid wastes; and
- (5) the identification of solid waste components and potential materials and energy recoverable from such waste components.

204(b)

In carrying out the provisions of the preceding subsection, the Secretary is authorized to—

- (1) collect and make available, through publications and other appropriate means, the results of, and other information pertaining to, such research and other activities, including appropriate recommendations in connection therewith;
- (2) cooperate with public and private agencies, institutions, and organizations, and with any industries involved, in the preparation and the conduct of such research and other activities; and

205(a)

The Secretary shall carry out an investigation and study to determine—

- (1) means of recovering materials and energy from solid waste, recommended uses of such materials and energy for national or international welfare, including identification of potential markets for such recovered resources, and the impact of distribution of such resources on existing markets;
- (2) changes in current product characteristics and production and packaging practices which would reduce the amount of solid waste;
- (3) methods of collection, separation, and containerization which will encourage efficient utilization of facilities and contribute to more effective programs of reduction, reuse, or disposal of wastes;
 - (4) the use of Federal procurement to develop market demand for recovered resources;
- (5) recommended incentives (including Federal grants, loans, and other assistance) and disincentives to accelerate the reclamation or recycling of materials from solid wastes, with special emphasis on motor vehicle hulks;
- (6) the effect of existing public policies, including subsides and economic incentives and disincentives, percentage depletion allowances, capital gains treatment and other tax incentives and disincentives, upon the recycling and reuse of materials, and the likely effect of the modification or elimination of such incentives and disincentives upon the reuse, recycling and conservation of such materials; and
- (7) the necessity and method of imposing disposal or other charges on packaging, containers, vehicles, and other manufactured goods, which charges would reflect the cost of final disposal, the value of recoverable components of the item, and any social costs associated with nonrecycling or uncontrolled disposal of such items.

207(b)(4)

Grants pursuant to this section may be made upon application therefor which—
provides for submission of such reports of the activities of the agency in carrying out the
purposes of this section, in such form and containing such information, as the Secretary may
from time to time find necessary for carrying out the purposes of this section and for keep-

ing such records and affording such access thereto as he may find necessary;

The Secretary shall submit to the Congress no later than two years after the date of enactment of the Resource Recovery Act of 1970, a comprehensive report and plan for the creation of a system of national disposal sites for the storage and disposal of hazardous wastes, including radioactive, toxic chemical, biological, and other wastes which may endanger public health or welfare.

PESTICIDE-RELATED STATUTORY AUTHORITY

FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT, as amended

(7 U.S.C. 136 et seq)

3(c)

"PROCEDURE FOR REGISTRATION.---

- "(1) Statement Required.—Each applicant for registration of a pesticide shall file with the Administrator a statement which includes—
 - "(A) the name and address of the applicant and of any other person whose name will appear on the labeling;
 - "(B) the name of the pesticide;
 - "(C) a complete copy of the labeling of the pesticide, a statement of all claims to be made for it, and any directions for its use;
 - "(D) if requested by the Administrator, a full description of the tests made and the results thereof upon which the claims are based.
- "(5) Approval of Registration.—The Administrator shall register a pesticide if he determines that, when considered with any restrictions imposed under subsection (d)—
 - "(A) its composition is such as to warrant the proposed claims for it;
 - "(B) its labeling and other material required to be submitted comply with the requirements of this Act;
 - "(C) it will perform its intended function without unreasonable adverse effects on the environment; and
 - "(D) when used in accordance with widespread and commonly recognized practice it will not generally cause unreasonable adverse effects on the environment.

3(d)

"CLASSIFICATION OF PESTICIDES.—

- "(1) Classification for General Use, Restricted Use, or Both.—
 - "(B) If the Administrator determines that the pesticide, when applied in accordance with its directions for use, warnings and cautions and for the uses for which it is registered, or for one or more of such uses, or in accordance with a widespread and commonly recognized practice, will not generally cause unreasonable adverse effects on the environment, he will classify the pesticide, or the particular use or uses of the pesticide to which the determination applies, for general use.
 - "(C) If the Administrator determines that the pesticide, when applied in accordance with its directions for use, warnings and cautions and for the uses for which it is registered, or for one or more of such uses, or in accordance with a widespread and commonly recognized practice, may generally cause, without additional regulatory restrictions, unreasonable adverse effects on the environment, including injury to the applicator, he shall classify the pesticide, or the particular use or uses to which the determination applies, for restricted use.

5(b)

"TEMPORARY TOLERANCE LEVEL.—If the Administrator determines that the use of a pesticide may reasonably be expected to result in any residue on or in food or feed, he may establish a temporary tolerance level for the residue of the pesticide before issuing the experimental use permit.

5(d)

"STUDIES.—When any experimental use permit is issued for a pesticide containing any chemical or combination of chemicals which has not been included in any previously registered pesticide, the Administrator may specify that studies be conducted to detect whether the use of the pesticide under the permit may cause unreasonable adverse effects on the environment. All results of such studies shall be reported to the Administrator before such pesticide may be registered under section 3.

5(e)

"REVOCATION.—The Administrator may revoke any experimental use permit, at any time, if he finds that its terms or conditions are being violated, or that its terms and conditions are inadequate to avoid unreasonable adverse effects on the environment.

6(b)

"CANCELLATION AND CHANGE IN CLASSIFICATION.—If it appears to the Administrator that a pesticide or its labeling or other material required to be submitted does not comply with the provisions of this Act or, when used in accordance with widespread and commonly recognized

practice, generally causes unreasonable adverse effects on the environment, the Administrator may issue a notice of his intent either—

- "(1) to cancel its registration or to change its classification together with the reasons (including the factual basis) for his action, or
- "(2) to hold a hearing to determine whether or not its registration should be canceled or its classification changed.

"SUSPENSION.—

- "(1) Order.—If the Administrator determines that action is necessary to prevent an imminent hazard during the time required for cancellation or change in classification proceedings, he may, by order, suspend the registration of the pesticide immediately.
- "(3) Emergency Order.—Whenever the Administrator determines that an emergency exists that does not permit him to hold a hearing before suspending, he may issue a suspension order in advance of notification to the registrant.

"INFORMATION REQUIRED.—

- "(1) Any producer operating an establishment registered under this section shall inform the Administrator within 30 days after it is registered of the types and amounts of pesticides—
 - "(A) which he is currently producing;
 - "(B) which he has produced during the past year; and
 - "(C) which he has sold or distributed during the past year.

The information required by this paragraph shall be kept current and submitted to the Administrator annually as required under such regulations as the Administrator may prescribe.

"REQUIREMENTS.—The Administrator may prescribe regulations requiring producers to maintain such records with respect to their operations and the pesticides and devices produced as he determines are necessary for the effective enforcement of this Act.

"INSPECTION.—For the purposes of enforcing the provisions of this Act, any producer, distributor, carrier, dealer, or any other person who sells or offers for sale, delivers or offers for delivery any pesticide or device subject to this Act, shall, upon request of any officer or employee of the Environmental Protection Agency or of any State or political subdivision, duly designated by the Administrator, furnish or permit such person at all reasonable times to have access to, and to copy: (1) all records showing the delivery, movement, or holding of such pesticide or device, including the quantity, the date of shipment and receipt, and the name of the consignor and consignee.

"IN GENERAL.—For purposes of enforcing the provisions of this Act, officers or employees duly designated by the Administrator are authorized to enter at reasonable times, any establishment or other place where pesticides or devices are held for distribution or sale for the purpose of inspecting and obtaining samples of any pesticides or devices, packaged, labeled, and released for shipment, and samples of any containers or labeling for such pesticides or devices.

Before undertaking such inspection, the officers or employees must present to the owner, operator, or agent in charge of the establishment or other place where pesticides or devices are held for distribution or sale, appropriate credentials and a written statement as to the reason for the inspection, including a statement as to whether a violation of the law is suspected. If no violation is suspected, an alternate and sufficient reason shall be given in writing. Each such inspection shall be commenced and completed with reasonable promptness. If the officer or employee obtains any samples, prior to leaving the premises, he shall give to the owner, operator, or agent in charge a receipt describing the samples obtained and, if requested, a portion of each such sample equal in volume or weight to the portion retained. If an analysis is made of such samples, a copy of the results of such analysis shall be furnished promptly to the owner, operator, or agent in charge.

"ENFORCEMENT.--

"(1) Certification of Facts to Attorney General.—The examination of pesticides or devices shall be made in the Environmental Protection Agency or elsewhere as the Administrator may designate for the purpose of determining from such examinations whether they comply with the requirements of this Act. If it shall appear from any such examination that they fail to comply with the requirements of this Act, the Administrator shall cause notice to be given to the person against whom criminal or civil proceedings are contemplated.

"STOP SALE, ETC., ORDERS.—Whenever any pesticide or device is found by the Administrator in any State and there is reason to believe on the basis of inspection or tests that such pesticide or device is in violation of any of the provisions of this Act, or that such pesticide or device

7(c)

6(c)

8(a)

8(b)

9(a)

9(c)

13(a)

has been or is intended to be distributed or sold in violation of any such provisions, or when the registration of the pesticide has been canceled by a final order or has been suspended, the Administrator may issue a written or printed 'stop sale, use, or removal' order to any person who owns, controls, or has custody of such pesticide or device, and after receipt of such order no person shall sell, use, or remove the pesticide or device described in the order except in accordance with the provisions of the order.

13(b)

"SEIZURE.—Any pesticide or device that is being transported or, having been transported, remains unsold or in original unbroken packages, or that is sold or offered for sale in any State, or that is imported from a foreign country, shall be liable to be proceeded against in any district court in the district where it is found and seized for confiscation by a process in rem for condemnation if—

"(1) in the case of a pesticide—

"(A) it is adulterated or misbranded;

"(B) it is not registered pursuant to the provisions of section 3;

"(C) its labeling fails to bear the information required by this Act;

"(D) it is not colored or discolored and such coloring or discoloring is required under this Act; or

"(E) any of the claims made for it or any of the directions for its use differ in substance from the representations made in connection with its registration;

"(2) in the case of a device, it is misbranded; or

"(3) in the case of a pesticide or device, when used in accordance with the requirements imposed under this Act and as directed by the labeling, it nevertheless causes unreasonable adverse effects on the environment. In the case of a plant regulator, defoliant, or desiccant, used in accordance with the label claims and recommendations, physical or physiological effects on plants or parts thereof shall not be deemed to be injury, when such effects are the purpose for which the plant regulator, defoliant, or desiccant was applied.

17(c)

"IMPORTATION OF PESTICIDES AND DEVICES.—The Secretary of the Treasury shall notify the Administrator of the arrival of pesticides and devices and shall deliver to the Administrator, upon his request, samples of pesticides or devices which are being imported into the United States, giving notice to the owner or consignee, who may appear before the Administrator and have the right to introduce testimony. If it appears from the examination of a sample that it is adulterated, or misbranded or otherwise violates the provisions set forth in this Act, or is otherwise injurious to health or the environment, the pesticide or device may be refused admission, and the Secretary of the Treasury shall refuse delivery to the consignee and shall cause the destruction of any pesticide or device refused delivery which shall not be exported by the consignee within 90 days from the date of notice of such refusal under such regulations as the Secretary of the Treasury may prescribe.

17(d)

"COOPERATION IN INTERNATIONAL EFFORTS.—The Administrator shall, in cooperation with the Department of State and any other appropriate Federal agency, participate and cooperate in any international efforts to develop improved pesticide research and regulations.

19(a)

"PROCEDURES.—The Administrator shall, after consultation with other interested Federal agencies, establish procedures and regulations for the disposal or storage of packages and containers of pesticides and for disposal or storage of excess amounts of such pesticides, and accept at convenient locations for safe disposal a pesticide the registration of which is canceled under section 6(c) if requested by the owner of the pesticide.

20

- "(a) RESEARCH.—The Administrator shall undertake research, including research by grant or contract with other Federal agencies, universities, or others as may be necessary to carry out the purposes of this Act, and he shall give priority to research to develop biologically integrated alternatives for pest control. The Administrator shall also take care to insure that such research does not duplicate research being undertaken by any other Federal agency.
- "(b) NATIONAL MONITORING PLAN.—The Administrator shall formulate and periodically revise, in cooperation with other Federal, State, or local agencies, a national plan for monitoring pesticides.
- "(c) MONITORING.—The Administrator shall undertake such monitoring activities, including but not limited to monitoring in air, soil, water, man, plants, and animals, as may be necessary for the implementation of this Act and of the national pesticide monitoring plan. Such activities shall be carried out in cooperation with other Federal, State, and local agencies.

- 25(c) "OTHER AUTHORITY.—The Administrator, after notice and opportunity for hearing, is authorized—
 - "(1) to declare a pest any form of plant or animal life (other than man and other than bacteria, virus, and other micro-organisms on or in living man or other living animals) which is injurious to health or the environment;
 - "(2) to determine any pesticide which contains any substance or substances in quantities highly toxic to man.

FEDERAL FOOD, DRUG, AND COSMETIC ACT

(21 U.S.C. 321 et seq)

406

Any poisonous or deleterious substance added to any food, except where such substance is required in the production thereof or cannot be avoided by good manufacturing practice shall be deemed to be unsafe for purposes of the application of clause (2)(A) of section 402(a); but when such substance is so required or cannot be so avoided, the Secretary shall promulgate regulations limiting the quantity therein or thereon to such extent as he finds necessary for the protection of public health, and any quantity exceeding the limits so fixed shall also be deemed to be unsafe for purposes of the application of clause (2)(A) of section 402(a). While such a regulation is in effect limiting the quantity of any such substance in the case of any food, such food shall not, by reason of bearing or containing any added amount of such substance, be considered to be adulterated within the meaning of clause (1) of section 402(a). In determining the quantity of such added substance to be tolerated in or on different articles of food the Secretary shall take into account the extent to which the use of such substance is required or cannot be avoided in the production of each such article, and the other ways in which the consumer may be affected by the same or other poisonous or deleterious substances.

408(a)

Any poisonous or deleterious pesticide chemical, or any pesticide chemical which is not generally recognized, among experts qualified by scientific training and experience to evaluate the safety of pesticide chemicals, as safe for use, added to a raw agricultural commodity, shall be deemed unsafe for the purposes of the application of clause (2) of section 402(a) unless—

(1) a tolerance for such pesticide chemical in or on the raw agricultural commodity has been prescribed by the Secretary of Health, Education, and Welfare under this section and the quantity of such pesticide chemical in or on the raw agricultural commodity is within the limits of the tolerance so prescribed; or

408(b)

The Secretary shall promulgate regulations establishing tolerances with respect to the use in or on raw agricultural commodities of poisonous or deleterious pesticide chemicals and of pesticide chemicals which are not generally recognized, among experts qualified by scientific training and experience, to evaluate the safety of pesticide chemicals, as safe for use, to the extent necessary to protect public health.

408(c)

The Secretary shall promulgate regulations exempting any pesticide chemical from the necessity of a tolerance with respect to use in or on any or all raw agricultural commodities when such a tolerance is not necessary to protect the public health. Such regulations shall be promulgated in the manner prescribed in subsection (d) or (e) of this section.

408(j)

The Secretary may, upon the request of any person who has obtained an experimental permit for a pesticide chemical under the Federal Insecticide, Fungicide, and Rodenticide Act or upon his own initiative, establish a temporary tolerance for the pesticide chemical for the uses covered by the permit whenever in his judgment such action is deemed necessary to protect the public health, or may temporarily exempt such pesticide chemical from a tolerance. In establishing such a tolerance, the Secretary shall give due regard to the necessity for experimental work in developing an adequate, wholesome, and economical food supply and to the limited hazard to the public health involved in such work when conducted in accordance with applicable regulations under the Federal Insecticide, Fungicide, and Rodenticide Act.

409(b)(4)

Upon request of the Secretary, the petitioner shall furnish samples of the food additive involved, or articles used as components thereof, and of the food in or on which the additive is proposed to be used.

PUBLIC HEALTH SERVICE ACT, as amended

(42 U.S.C. 201 et seq)

301

The Surgeon General shall conduct in the Service, and encourage, cooperate with, and render assistance to other appropriate public authorities, scientific institutions, and scientists in the conduct of, and promote the coordination of, research, investigations, experiments, demonstrations, and studies relating to the causes, diagnosis, treatment, control, and prevention of physical and mental diseases and impairments of man, including water purification, sewage treatment, and pollution of lakes and streams.

314(a)(1)(G)

Provide that the State agency will make such reports, in such form and containing such information, as the Secretary may from time to time reasonably require, and will keep such records and afford such access thereto as the Secretary finds necessary to assure the correctness and verification of such reports;

314(a)(1)(H)

Provide that the State agency will from time to time, but not less often than annually, review its State plan approved under this subsection and submit to the Secretary appropriate modifications thereof;

361(a)

The Surgeon General, with the approval of the Secretary is authorized to make and enforce such regulations as in his judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession. For purposes of carrying out and enforcing such regulations, the Surgeon General may provide for such inspection, fumigation, disinfection, sanitation, pest extermination, destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings, and other measures, as in his judgment may be necessary.

FEDERAL WATER POLLUTION CONTROL ACT, as amended

(33 U.S.C. 1254(1) et seq)

104(l)

- (1) The Administrator shall, after consultation with appropriate local, State, and Federal agencies, public and private organizations, and interested individuals, as soon as practicable but not later than January 1, 1973, develop and issue to the States for the purpose of carrying out this chapter the latest scientific knowledge available in indicating the kind and extent of effects on health and welfare which may be expected from the presence of pesticides in the water in varying quantities. He shall revise and add to such information whenever necessary to reflect developing scientific knowledge.
- (2) The President shall, in consultation with appropriate local, State, and Federal agencies, public and private organizations, and interested individuals, conduct studies and investigations of methods to control the release of pesticides into the environment which study shall include examination of the persistency of pesticides in the water environment and alternatives thereto. The President shall submit reports, from time to time, on such investigations to Congress together with his recommendations for any necessary legislation.

STUDIES OF EFFECTS IN USE OF CHEMICALS

(16 U.S.C. 742d)

The Secretary of the Interior is authorized and directed to undertake comprehensive continuing studies on the effects of insecticides, herbicides, fungicides and pesticides, upon the fish and wild-life resources of the United States, for the purpose of determining the amounts, percentages, and formulations of such chemicals that are lethal to or injurious to fish and wildlife and the amounts, percentages, mixtures, or formulations that can be used safely, and thereby prevent losses of fish and wildlife from such spraying, dusting, or other treatment.

SPECIAL PACKAGING OF HOUSEHOLD SUBSTANCES FOR PROTECTION OF CHILDREN

(15 U.S.C. 1471 et seq)

1472(a)

The Secretary, after consultation with the technical advisory committee provided for in section 1475 of this title, may establish in accordance with the provisions of this Act, by regulation, standards for the special packaging of any household substance if he finds that—

- (1) the degree or nature of the hazard to children in the availability of such substance, by reason of its packaging, is such that special packaging is required to protect children from serious personal injury or serious illness resulting from handling, using, or ingesting such substance; and
- (2) the special packaging to be required by such standard is technically feasible, practicable, and appropriate for such substance.

1472(b)

- In establishing a standard under this section, the Secretary shall consider—
 - (1) the reasonableness of such standard;
 - (2) available scientific, medical, and engineering data concerning special packaging and concerning childhood accidental ingestions, illness, and injury caused by household substances;
 - (3) the manufacturing practices of industries affected by this Act; and
 - (4) the nature and use of the household substance.

RADIATION-RELATED STATUTORY AUTHORITY

1954 ATOMIC ENERGY ACT, as amended

(42 U.S.C. 2021)

2021(h)

There is established a Federal Radiation Council, consisting of the Secretary of Health, Education, and Welfare, the Chairman of the Atomic Energy Commission, the Secretary of Defense, the Secretary of Commerce, the Secretary of Labor, or their designees, and such other members as shall be appointed by the President. The Council shall consult qualified scientists and experts in radiation matters, including the President of the National Committee on Radiation Protection and Measurement, and qualified experts in the field of biology and medicine and in the field of health physics. The Special Assistant to the President for Science and Technology, or his designee, is authorized to attend meetings, participate in the deliberations of, and to advise the Council. The Chairman of the Council shall be designated by the President from time to time, from among the members of the Council. The Council shall advise the President with respect to radiation matters, directly or indirectly affecting health, including guidance for all Federal agencies in the formulation of radiation standards and in the establishment and execution of programs of cooperation with States. The Council shall also perform such other functions as the President may assign to it by Executive Order.

2051(a)

The Commission is directed to exercise its powers in such manner as to insure the continued conduct of research and development and training activities in the fields specified below, by private or public institutions or persons, and to assist in the acquisition of an ever-expanding fund of theoretical and practical knowledge in such fields. To this end the Commission is authorized and directed to make arrangements (including contracts, agreements, and loans) for the conduct of research and development activities relating to—

- (1) nuclear processes;
- (2) the theory and production of atomic energy, including processes, materials, and devices related to such production;
- (3) utilization of special nuclear material and radioactive material for medical, biological, agricultural, health, or military purposes;
- (4) utilization of special nuclear material, atomic energy, and radioactive material and processes entailed in the utilization or production of atomic energy or such material for all other purposes, including industrial or commercial uses, the generation of usable energy, and the demonstration of advances in the commercial or industrial application of atomic energy; and
- (5) the protection of health and the promotion of safety during research and production activities.

PUBLIC HEALTH SERVICE ACT

(42 U.S.C. 201 et seq)

301

The Surgeon General shall conduct in the Service, and encourage, cooperate with, and render assistance to other appropriate public authorities, scientific institutions, and scientists in the conduct of, and promote the coordination of, research, investigations, experiments, demonstrations, and studies relating to the causes, diagnosis, treatment, control, and prevention of physical and mental diseases and impairments of man, including water purification, sewage treatment, and pollution of lakes and streams.

305(a)

The Surgeon General is authorized, (1) to make, by sampling or other appropriate means, surveys and special studies of the population of the United States to determine the extent of illness and disability and related information such as: (G) environmental and social health hazards; and (H) family formation, growth, and dissolution; and (2) in connection therewith, to develop and test new or improved methods for obtaining current data on illness and disability and related information.

305(b)

The Secretary is authorized, directly or by contract, to undertake research, development, demonstration, and evaluation, relating to the design and implementation of a cooperative system for producing comparable and uniform health information and statistics at the Federal, State, and local levels.

314(a)(2)

- (G) provide that the State agency will make such reports, in such form and containing such information, as the Secretary may from time to time reasonably require, and will keep such records and afford such access thereto as the Secretary finds necessary to assure the correctness and verification of such reports;
- (H) provide that the State agency will from time to time, but not less often than annually, review its State plan approved under this subsection and submit to the Secretary appropriate modifications thereof;

NOISE-RELATED STATUTORY AUTHORITY

NOISE CONTROL ACT OF 1972

(42 U.S.C. 4901 et seq)

4(b)

Each department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government—

- (1) having jurisdiction over any property or facility, or
- (2) engaged in any activity resulting, or which may result, in the emission of noise. shall comply with Federal, State, interstate, and local requirements respecting control and abatement of environmental noise to the same extent that any person is subject to such requirements.

(1) The Administrator shall coordinate the programs of all Federal agencies relating to noise research and noise control. Each Federal agency shall, upon request, furnish to the Administrator such information as he may reasonably require to determine the nature, scope, and results of the noise-research and noise-control programs of the agency.

- (2) Each Federal agency shall consult with the Administrator in prescribing standards or regulations respecting noise. If at any time the Administrator has reason to believe that a standard or regulation, or any proposed standard or regulation, of any Federal agency respecting noise does not protect the public health and welfare to the extent he believes to be required and feasible, he may request such agency to review and report to him on the advisability of revising such standard or regulation to provide such protection.
- (3) On the basis of regular consultation with appropriate Federal agencies, the Administrator shall compilé and publish, from time to time, a report on the status and progress of Federal activities relating to noise research and noise control. This report shall describe the noise-control programs of each Federal agency and assess the contributions of those programs to the Federal Government's overall efforts to control noise.
- (1) The Administrator shall, after consultation with appropriate Federal agencies and within nine months of the date of the enactment of this Act, develop and publish criteria with respect to noise. Such criteria shall reflect the scientific knowledge most useful in indicating the kind and extent of all identifiable effects on the public health or welfare which may be expected from differing quantities and qualities of noise.
- (2) The Administrator shall, after consultation with appropriate Federal agencies and within twelve months of the date of the enactment of this Act, publish information on the levels of environmental noise the attainment and maintenance of which in defined areas under various conditions are requisite to protect the public health and welfare with an adequate margin of safety.

The Administrator shall, after consultation with appropriate Federal agencies, compile and publish a report or series of reports (1) identifying products (or classes of products) which in his judgment are major sources of noise, and (2) giving information on techniques for control of noise from such products, including available data on the technology, costs, and alternative methods of noise control. The first such report shall be published not later than eighteen months after the date of enactment of this Act.

Any regulation under subsection (a) or (b) (and any revision thereof) may contain testing procedures necessary to assure compliance with the emission standard in such regulation, and may contain provisions respecting instructions of the manufacturer for the maintenance, use, or repair of the product.

For each product (or class thereof) designated under subsection (a) the Administrator shall by regulation require that notice be given to the prospective user of the level of the noise the product emits, or of its effectiveness in reducing noise, as the case may be. Such regulations shall specify (1) whether such notice shall be affixed to the product or to the outside of its container, or to both, at the time of its sale to the ultimate purchaser or whether such notice shall be given to the prospective user in some other manner, (2) the form of the notice, and (3) the methods and units of measurement to be used. Sections 6(c)(2) shall apply to the prescribing of any regulation under this section.

Each manufacturer of a product to which regulations under section 6 or section 8 apply shall—

4(c)

5(a)

5(b)

6(c)(1)

8(b)

13(a)

- (1) establish and maintain such records, make such reports, provide such information, and make such tests, as the Administrator may reasonably require to enable him to determine whether such manufacturer has acted or is acting in compliance with this Act,
- (2) upon request of an officer or employee duly designated by the Administrator, permit such officer or employee at reasonable times to have access to such information and the results of such tests and to copy such records, and
- (3) to the extent required by regulations of the Administrator, make products coming off the assembly line or otherwise in the hands of the manufacturer available for testing by the Administrator.

In furtherance of his responsibilities under this Act and to complement, as necessary, the noiseresearch programs of other Federal agencies, the Administrator is authorized to:

- (1) Conduct research, and finance research by contract with any person, on the effects, measurement, and control of noise, including but not limited to-
 - (A) investigation of the psychological and physiological effects of noise on humans and the effects of noise on domestic animals, wildlife, and property, and determination of acceptable levels of noise on the basis of such effects:
 - (B) development of improved methods and standards for measurement and monitoring of noise, in cooperation with the National Bureau of Standards, Department of
 - (C) determination of the most effective and practicable means of controlling noise emission.
- (2) Provide technical assistance to State and local governments to facilitate their development and enforcement of ambient noise standards, including but not limited to-
 - (A) advice on training of noise-control personnel and on selection and operation of noise-abatement equipment; and
 - (B) preparation of model State or local legislation for noise control.
- The Administrator shall certify any product-15(a)(2)
 - (A) for which a certification application has been filed in accordance with paragraph (5)(A) of this subsection;
 - (B) which is a low-noise-emission product as determined by the Administrator;
 - (A) Any person seeking to have a class or model of product certified under this section shall file a certification application in accordance with regulations prescribed by the Administrator.
 - (D) The Administrator shall conduct whatever investigation is necessary, including actual inspection of the product at a place designated in regulations prescribed under subparagraph (A).
- The Administrator shall, from time to time as he deems appropriate, test the emissions of noise 15(f) from certified low-noise-emission products purchased by the Federal Government,
 - Within nine months after the date of enactment of this Act, the Administrator shall publish proposed noise emission regulations for surface carriers engaged in interstate commerce by railroad. Such proposed regulations shall include noise emission standards setting such limits on noise emissions resulting from operation of the equipment and facilities of surface carriers engaged in interstate commerce by railroad which reflect the degree of noise reduction achievable through the application of the best available technology, taking into account the cost of compliance. These regulations shall be in addition to any regulations that may be proposed under section 6 of this
 - Within nine months after the date of enactment of this Act, the Administrator shall publish proposed noise emission regulations for motor carriers engaged in interstate commerce. Such proposed regulations shall include noise emission standards setting such limits on noise emissions resulting from operation of motor carriers engaged in interstate commerce which reflect the degree of noise reduction achievable through the application of the best available technology, taking into account the cost of compliance. These regulations shall be in addition to any regulations that may be proposed under section 6 of this Act.

14

15(a)(5)

17(a)(1)

18(a)(1)

NOISE POLLUTION AND ABATEMENT ACT OF 1970

(42 U.S.C. 1858)

402(a)

The Administrator shall establish within the Environmental Protection Agency an Office of Noise Abatement and Control, and shall carry out through such Office a full and complete investigation and study of noise and its effect on the public health and welfare in order to (1) identify and classify causes and sources of noise, and (2) determine—

- (A) effects at various levels;
- (B) projected growth of noise level in urban areas through the year 2000;
- (C) the psychological and physiological effect on humans;
- (D) effects of sporadic extreme noise (such as jet noise near airports) as compared with constant noise:
 - (E) effect on wildlife and property (including values);
 - (F) effect of sonic booms on property (including values); and
 - (G) such other matters as may be of interest in the public welfare.

402(b)

In conducting such investigation, the Administrator shall hold public hearings, conduct research, experiments, demonstrations, and studies. The Administrator shall report the results of such investigation and study, together with his recommendations for legislation or other action, to the President and the Congress not later than one year after the date of enactment of this title.

INTERDISCIPLINARY STATUTORY AUTHORITY

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

(42 U.S.C. 4321 et seq)

204(5) "to conduct investigations, studies, surveys, research, and analyses relating to ecological systems and environmental quality."

AIRPORT AND AIRWAY DEVELOPMENT ACT, as amended

(49 U.S.C. 1716)

16(e) AIR AND WATER QUALITY.—

(1) The Secretary shall not approve any project application for a project involving airport location, a major runway extension, or runway location unless the Governor of the State in which such project may be located certifies in writing to the Secretary that there is reasonable assurance that the project will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards. In any case where such standards have not been approved or where such standards have been promulgated by the Secretary of the Interior* or the Secretary of Health, Education, and Welfare,* certification shall be obtained from the appropriate Secretary. Notice of certification or of refusal to certify shall be provided within sixty days after the project application is received by the Secretary.

^{*}These responsibilities are now with the Administrator of EPA.

FEDERAL AID HIGHWAY ACT, as amended

(23 U.S.C. 109)

136(h)

"Not later than July 1, 1972, the Secretary (of Transportation), after consultation with appropriate Federal and State officials, shall submit to Congress, and not later than 90 days after such submission, promulgate guidelines designed to assure that possible adverse economic, social, and environmental effects relating to any proposed project on any Federal-aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe and efficient transportation, public services, and the costs of eliminating or minimizing such adverse effects and the following:

- "(1) air, noise, and water pollution;
- "(2) destruction or disruption of man-made and natural resources, aesthetic values, community cohesion and the availability of public facilities and services;

136(i)

"The Secretary, after consultation with appropriate Federal, State, and local officials, shall develop and promulgate standards for highway noise levels compatible with different land uses and after July 1, 1972, shall not approve plans and specifications for any proposed project on any Federal-aid system for which location approval has not yet been secured unless he determines that such plans and specifications include adequate measures to implement the appropriate noise level standards.

136(j)

"The Secretary, after consultation with the Administrator of the Environmental Protection Agency, shall develop and promulgate guidelines to assure that highways constructed pursuant to this title are consistent with any approved plan for the implementation of any ambient air quality standard for any air quality control region designated pursuant to the Clean Air Act, as amended."

PENDING STATUTORY AUTHORITY

SAFE DRINKING WATER ACT OF 1973

4(a)

The Administrator shall, after consultation with the Secretary of Health, Education, and Welfare, (1) issue initial proposed regulations prescribing national primary drinking water standards within one hundred and eighty days after the date of enactment of this Act and (2) issue initial proposed regulations prescribing national secondary drinking water standards within one hundred and eighty days after the date of such enactment. The Administrator shall specify in such proposed regulations the date on which such regulations shall take effect, which shall be as soon as is practicable.

4(b)

- (1) National primary drinking water standards shall be drinking water standards and programs, the attainment and maintenance of which, are requisite to reasonably protect the public health, except that the Administration shall not prescribe the addition of any substance other than for the purpose of treating contaminants. Such standards—
 - (A) shall prescribe the maximum permissible levels for any contaminants which may exist in any public water system in the United States which may cause or transmit disease, chemical poisoning, or other impairments to man, allowing adequate margins of safety;
 - (B) may apply to any feature of the water supply system including, but not limited to, the treatment, storage, and distribution facilities;
 - (C) shall include requirements for the adequate operation, maintenance, surveillance, and monitoring of water quality adequate to assure a dependable supply of drinking water which meets the requirements of subparagraph (A); and
 - (D) shall include requirements for construction and site selection of public water system facilities to protect such facilities from floods and other natural disasters.
- (2) National secondary drinking water standards shall specify the level of quality of drinking water the attainment and maintenance of which is requisite to reasonably assure aesthetically adequate drinking water. Such standards may apply to any constituent of drinking water which may affect the taste, odor, or appearance of such water or which may otherwise be necessary to assure aesthetically adequate drinking water.

4(c)

The Administrator shall publish simultaneously with the issuance of any proposed national primary or national secondary drinking water standard under this section—

- (1) such criteria and information as, in his judgment, are necessary to accurately reflect the nature and extent of all identifiable effects on public health or welfare which may be expected from the presence of the contaminant which is the object of such proposed drinking water standards; and
- (2) information and data on drinking water treatment methods and technology for the control of the contaminant which is the object of such proposed drinking water standard. Such information and data shall apply to each feature of the water supply system at which control of the contaminant may be exercised including, but not limited to, treatment, storage, and distribution facilities and the adequate construction, maintenance, and operation thereof. Such information and data shall include the costs of such treatment and its effectiveness in controlling such contaminant.

4(d)

The Administrator shall, at least once every three years, review the adequacy of any national primary or secondary drinking water standard prescribed under this section and the criteria, information, and data published under this section. The Administrator shall publish his finding in the Federal Register.

5(a)

For the purposes of this Act, a State has primary enforcement responsibility during any period for which the Administrator has approved a plan in accordance with section 11(d) of this Act and such plan is not being unreasonably deviated from to any significant extent by such State. If any such State has primary enforcement responsibility, the Administrator shall monitor the activities of such State only to the extent necessary to determine if such plan is being unreasonably deviated from to any significant extent. To the maximum extent practicable, any such monitoring shall not duplicate the activities of such State.

6(b)

If an imminent hazard exists, the Administrator may petition an appropriate district court of the United States, or he may request the Attorney General to do so, to order such action as is necessary to eliminate the imminent hazard.

8(a)

The Administrator shall conduct and promote the coordination of research, studies, and investigations and render financial, technical, and other assistance to appropriate public agencies, institutions, water supply utilities, and individuals in the conduct of research, studies, and investigations relating to the causes, diagnosis, treatment, control, and prevention of diseases and impairments of human beings resulting directly or indirectly from contaminants in drinking water, or to the provision of an adequate quality and quantity of safe drinking water. Such research, studies, or investigations may include, but shall not be limited to, the development of new and improved methods—

- (1) to identify and measure the existence of contaminants in drinking water and to identify the source of such contaminants:
 - (2) to identify and measure the health effects of contaminants in drinking water;
- (3) of treating water to prepare it for drinking, to improve the efficiency of water treatment and to remove contaminants from the water; and
- (4) for providing the public with adequate quantities of safe water for drinking, including improvements in water purification and distribution, and methods of assessing the health-related hazards of other characteristics of drinking water supplies.

In carrying out this Act, the Administrator is authorized to—

(1) collect and make available information pertaining to research and investigations, with respect to providing adequate quality and quantity of safe drinking water together with appropriate recommendations in connection therewith;

The Administrator shall conduct a study of the contamination of ground water resources in the United States which are utilized for the provision of drinking water. Such study shall include, but shall not be limited to, a survey of the nature, extent, and causes of such contamination and the extent to which existing State and Federal law controls such contamination.

The Administrator shall (after consultation with the Secretary of Agriculture and the several States) enter into such arrangements with public or private entities as may be appropriate to conduct a survey of the quantity, quality, and availability of rural drinking water supplies.

Each supplier of water who is subject to a standard prescribed under section 4 of this Act or each grantee shall establish and maintain such records, make such reports, and provide such information as the Administrator shall reasonably require to assist him in establishing standards and regulations under this Act and in determining whether such person has acted or is acting in compliance with this Act. Suppliers of water and other persons subject to State

Any officer or employee duly designated by the Administrator, upon presenting appropriate credentials and a written notice of inspection authority to any supplier of water subject to a standard prescribed under section 4 of this Act or any grantee (or person in charge of any of its property), is authorized to enter any establishment, facility, or other property of such supplier of water or grantee in order to determine whether such person has acted or is acting in compliance with this Act. Such officer or employee may inspect, at reasonable times, records, files, papers, processes, controls, and facilities, and may test any feature of a public water system, including its raw water source. Each

Except as provided for in subsection (b) of this section, each Federal department or agency having jurisdiction over any building, installation, or other property, which is or will be served by a federally owned or maintained public water system, shall comply with all national primary drinking water standards prescribed under section 4 of this Act and shall, to the maximum extent practicable comply with any national secondary drinking water standard prescribed under such section.

8(b)

8(c)(1)

9(a)

13(a)

13(b)

19(a)

TOXIC SUBSTANCES CONTROL ACT OF 1973

4(a)

Within one year after the date of enactment of this Act and from time to time thereafter, the Administrator shall issue proposed regulations to establish such standards for test protocols for various chemical substances or classes of chemical substances or uses thereof and for the results to be achieved therefrom as are necessary to protect health and environment. Such regulations shall apply to those chemical substances or classes or uses of chemical substances which are produced in commercial quantities and which the Administrator has reason to believe may pose an unreasonable threat to human health or the environment. To the extent feasible, such regulations shall indicate the use or distribution of a chemical substance which will be permitted upon and only upon the attainment of specified test results.

4(b)

In issuing the proposed regulations required under subsection (a) and in issuing any subsequent final regulations, the Administrator shall consider all relevant factors including—

- (1) the effects of the chemical substance on health and the magnitude of human exposure;
- (2) the effects of the chemical substance on the environment and the magnitude of environmental exposure:
- (3) any benefit of the chemical substance and the availability of less hazardous substitutes for any use or distribution of such substance;
- (4) the extent to which the test protocol is reasonably predictive of the potential adverse effects of the chemical substance on health or the environment; and
- (5) any data concerning the safety of the chemical substance which may affect the requirements of the test protocol.

4(c)

Test protocols established under this section may include tests for carcinogenesis, teratogenesis, mutagenesis, persistence, the cumulative properties of the substance, the synergistic properties of the substance and other types of hazards, and epidemiological studies of the effects of the chemical substance.

5(a)

One hundred and eighty days after the date of enactment of this Act, and thereafter, any manufacturer of a new chemical substance shall notify the Administrator, at least ninety days in advance of the commercial production of such substance, and when tendering such notice such manufacturer shall submit to the Administrator the information referred to in section 10(a) of this Act insofar as it pertains to such substance. If in the judgment of the Administrator a substance is of no unreasonable environmental or public health threat, he may reduce the number of days after submission of such information during which commercial production may not occur.

6(a)

The Administrator shall issue, within one year after the date of enactment of this Act and from time to time thereafter, proposed regulations specifying those existing chemical substances or classes or uses of chemical substances which are produced or imported into the United States in commercial quantities and which the Administrator has reason to believe may pose an unreasonable threat to human health or the environment. Concurrently with each proposal to specify such existing chemical substance, the Administrator shall propose regulations under section 4 of this Act, if he has not previously done so, which are applicable to each existing chemical substance so specified. On or before the effective date of any applicable regulation under section 4 of this Act, any manufacturer of an existing chemical substance shall furnish the test data developed in accordance with such regulations of the Administrator. Subject to section 16 of the Act, the Administrator shall, upon receipt of such test data from a manufacturer, promptly publish in the Federal Register the identity of such existing chemical substance, the uses to which the substance is put, and a statement of the availability of test data.

7(a)

If warranted by data available to him, or in the absence of acceptable test data required under sections 5 or 6 of this Act, the Administrator may issue proposed regulations (1) to restrict the use or distribution of any chemical substance or products containing such substance to the extent necessary to protect health and the environment; (2) to require that any or all persons engaged in the distribution of the chemical substance or product so regulated give notification to purchasers or other recipients of the substance or product of such restrictions in such form and manner as the Administrator determines is necessary to protect health and the environment including labeling requirements on such chemical substances or products containing such substances with appropriate

warning provisions and directions for use and disposal; and (3) to require such other action as may be necessary to carry out such restrictions including recalling and remedying, replacing, or refunding the purchase price of such products or substances.

In issuing proposed regulations under subsection (a) and in issuing any subsequent final regulations, the Administrator shall consider all relevant factors including—

- (1) the effects of the substance on human health;
- (2) the effects of the substance on the environment;
- (3) the benefits of the substance for various uses;
- (4) the normal circumstances of use;
- (5) the degree to which the substance is released to the environment; and
- (6) the magnitude of exposure of human beings and the environment to the substance;

Whenever the Administrator has good cause to believe that a particular manufacturer or processor is producing or processing a chemical substance or product not in compliance with a particular restriction on use or distribution requiring reasonably consistent composition of such chemical substance or product—

- (1) he may require such manufacturer or processor to submit a description of the relevant quality control procedures followed in the manufacturing or processing of such chemical substance or product; and
- (2) if he thereafter determines that such noncompliance is attributable to the inadequacy of the manufacturer's or processor's control procedures, he may, after notice and opportunity for hearing pursuant to section 554 of title 5, United States Code, order the manufacturer or processor to revise such quality control procedures to the extent necessary to remedy such inadequacy.

An imminent hazard shall be considered to exist when the evidence is sufficient to show that the manufacture, processing, distribution, use, or disposal of a chemical substance or product containing such substance will result in any unreasonable threat to human health or the environment prior to the completion of an administrative hearing or other formal proceeding held pursuant to this Act.

Any chemical substance or product containing such substance which the Administrator finds (1) is manufactured, processed, distributed, used, or disposed of in violation of section 5, 6, or 7 of this Act, where there is reason to believe such substance or product poses an unreasonable threat to human health or the environment, or (2) constitute an imminent hazard under section 8 of this Act shall be liable to be proceeded against by the Administrator or the Attorney General on libel of information and condemned in any district court of the United States within the jurisdiction of which such substance or product is found. Such substance or product shall be liable to seizure by process pursuant to the libel. In cases under this section, the procedure shall conform, as nearly as may be, to a proceeding in rem in admiralty.

The Administrator shall require all manufacturers of chemical substances or, where appropriate, processors to submit reports to him annually and at such more frequent times as he may reasonably require containing any or all of the following—

- (1) the names of any or all chemical substances produced, imported, or processed in commercial quantities by the manufacturer or processor thereof;
- (2) the chemical identity and molecular structure of such substances insofar as is known to him or is reasonably ascertainable by him;
- (3) the categories of use of each such substance, insofar as they are known to him or are reasonably ascertainable by him;
- (4) reasonable estimates of the amounts of each substance produced or processed for each such category of use; and
- (5) a description of the byproducts, if any, resulting from the production of each such substance, and, insofar as they are known to him or are reasonably ascertainable by him, from the processing, use, or disposal thereof.

If it appears to the Administrator that any such substance may pose a hazard when transported, or when used on or in food or as a drug or cosmetic, he shall transmit any data received from manufacturers or processors or data otherwise in his possession which is relevant to such hazards to the Federal department or agency with authority to take legal action if a hazard is found to exist.

The Administrator is authorized to conduct such research and monitoring as is necessary to carry out his functions under this Act. Such research and monitoring may be undertaken to (i) determine proper standards for test protocols and results to be obtained therefrom under section 4

7(c)

7(b)

8(a)

9(a)

10(a)

11(c)

13

of this Act, (ii) determine what existing chemical substances might present unreasonable hazards under section 6 of this Act, (iii) monitor chemical substances in man and in the environment as is necessary to carry out the purposes of this Act, and (iv) confirm the results of tests required by this Act. To the extent possible, such research and monitoring shall not duplicate the efforts of other Federal agencies or the research required of manufacturers under this Act. In order to carry out the provisions of this section, the Administrator is authorized to make contracts and grants for such research and monitoring. The Administrator may construct research laboratories for the purposes of this Act (i) after fully utilizing the personnel, facilities, and other technical support available in other Federal agencies, (ii) when authorized by the Congress to plan, design, and construct such laboratories, and (iii) subject to the appropriation of funds for this purpose by the Congress.

14(a)(1)

For the purpose of inspecting, copying, and verifying the correctness of records, reports, or other documents required to be kept or made under this Act and to otherwise facilitate the carrying out of his functions under this Act, the Administrator is authorized, in accordance with this section, to enter any factory, warehouse, or other premises in which chemical substances or products containing such substances are manufactured, processed, stored, held, or maintained, including retail establishments, and to conduct administrative inspections thereof.

15(a)

Although any chemical substances or products may be exported, test data and reporting requirements still must be met. However, no substance or product may be exported if its use will directly or indirectly threaten the health or environment of the U.S.

15(c)

The Secretary of the Treasury shall refuse entry into the United States of any chemical substance or product containing such substance offered for entry if it fails to conform with the regulations promulgated under this Act.

24(c)

Proposed and final regulations issued under this Act shall set forth findings of fact on which the regulations are based and shall state the relationship of such findings to the regulations issued.

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