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AN ANALYSIS OF FEDERAL LEGISLATIVE JURISDICTIONAL RESPONSIBILITIES

FOR TOXIC AND HAZARDOUS MATERIALS.

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FINAL REPORT,

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CONTRACT EMW-08271

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FEBRUARY 1989

Richard P. Nalesnik  
Jerome R. Kearney

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FOR TOXIC AND HAZARDOUS MATERIALS**

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**CONTRACT EMW-00271**

**FINAL REPORT  
February, 1980**

*5-1-80*

**PREPARED FOR**  
**THE FEDERAL EMERGENCY MANAGEMENT AGENCY**  
**DIVISION OF MITIGATION AND RESEARCH**  
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## INTRODUCTION

This research is an attempt to outline the scope and character of federal agency jurisdiction for the control of toxic substances and hazardous materials according to the present state of federal legislation. Eleven independent federal agencies have jurisdiction in this area by virtue of provisions of more than thirty pieces of legislation.

It must be noted from the beginning that this legislative summary and jurisdictional outline is conducted for the purposes of a specific federal agency — The Federal Emergency Management Agency. It, therefore, is prompted by, and reflects, that agency's purpose and objectives.

The manufacture, handling, transportation, use and disposal of toxic substances and hazardous materials present multiple possibilities for the creation of emergency situations. Appropriate, decisive and efficient management of these situations demands a factual and clear appreciation of federal jurisdiction in the particular circumstance.

This research reflects that concern and is organized for that purpose. The legislative summaries are comprehensive digests of major provisions of particular bills. No attempt is made to include every provision. Rather, the goal is to highlight the nature of the legislation as it impinges on the toxic substances issue and to identify the jurisdictional responsibilities.

The legislation cited in this report also reflects that selection process. Other pieces of legislation could be included as operative in the toxic/hazardous control effort, but would not add anything substantive, either by way of control or jurisdictional responsibility, to an appreciation of the implications for emergency management.

Finally, the entire area of radioactive substances has been excluded from this consideration. The magnitude of concerns that this hazardous material raises falls beyond the scope of this present work and demands unique attention.

## **METHODOLOGY**

The basic methodology employed in selecting legislation to be included in this study came from two sources. The first was from the perspective of federal regulatory programs and activities. A breakdown of the legislation authorizing such activities is given in "Federal Regulatory Programs and Activities" (NTIS PB 278 489).

Data from the Toxic Substances Strategy Committee was the second source used in this legislative compilation. A specific listing of federal legislation affecting toxic substances control is provided through a study entitled, "An Analysis of Past Federal Efforts to Control Toxic Substances" (Washington, D.C.: Environmental Law Institute, 1978).

Those two sources served as the matrix for choosing specific pieces of legislation to be included in this study. Our own research and evaluation supplemented the process.

Other pieces of legislation that impinge upon this topic but which have been judged not to add anything substantive concerning jurisdictional responsibility would include the Coastal Zone Management Act of 1972, the Energy Supply and Environmental Coordination Act of 1974, the Flammable Fabrics Act and the National Environmental Policy Act.

The legislative summaries emerge as the product of researching the text of the public law and the legislative history surrounding each. In the latter category the CIS Index served as a valuable tool.

TABLE I

MAJOR FEDERAL LAWS AND AGENCIES AFFECTING CONTROL OF TOXIC SUBSTANCES AND HAZARDOUS MATERIALS

<u>STATUTE</u>	<u>AGENCY WITH JURISDICTIONAL RESPONSIBILITY</u>	<u>SUMMARY</u>
Toxic Substances Control Act of 1976	EPA	regulates testing, manufacture, sale, use and disposal of chemicals and premarket evaluation of data on new chemical substances;
Clean Air Act of 1970 Clean Air Act Amendments of 1977	EPA DOT	establishes ambient air quality standards, standards for new and modified stationary sources, national emission standards for hazardous air pollutants, emission standards for moving sources and regulation of fuels; reviews environmental impact of federal agency activities;
Federal Food, Drug and Cosmetic Act	EPA HEW	regulates quantities of poisonous and deleterious substances added to any food; establishes tolerances with respect to use of poisonous or deleterious pesticide chemicals on raw agricultural commodities; prescribes conditions for safe use of food additives; protects against adulterated toxic substances in drugs and cosmetics;
Federal Water Pollution Control Act Amendments of 1972 Clean Water Act of 1977	EPA DOT ARMY FMC	establishes effluent limitations, water quality standards for navigable waters and federal standards of performance for maritime sanitation devices; issues permits for discharges into navigable waters and for disposals of sewage sludge; exercises President's authority to determine imminent and substantial threats due to oil or hazardous substance spillage; demands inspection of vessels carrying such cargo; requires clean-up of oil or hazardous substances discharged in navigable waters; regulates discharges of pollutants from a vessel into navigable waters;

TABLE I (continued)

MAJOR FEDERAL LAWS AND AGENCIES AFFECTING CONTROL OF TOXIC SUBSTANCES AND HAZARDOUS MATERIALS

<u>STATUTE</u>	<u>AGENCY WITH JURISDICTIONAL RESPONSIBILITY</u>	<u>SUMMARY</u>
Federal Environmental Pesticide Control Act of 1972 Federal Environmental Pesticide Control Act Amendments of 1975 Federal Environmental Pesticide Control Act Amendments of 1978	EPA	regulates pesticides and devices and producers of pesticides and devices;
Safe Drinking Water Act of 1974	EPA HEW	develops national criteria, standards and guidelines for drinking water and protection of underground sources of drinking water;
Marine Protection, Resources and Sanctuaries Act of 1972	EPA DOT COMMERCE ARMY	regulates ocean dumping by designating dumping sites and issuing ocean dumping permits; authorizes regulations to control activities permitted within marine sanctuaries;
Resource Conservation and Recovery Act of 1976	EPA	establishes criteria and standards for identifying, handling, storing, transportation and disposal of hazardous wastes; issues permits for treatment, storage or disposal of hazardous wastes and sets criteria for sanitary landfill;
Occupational Safety and Health Act of 1970	DOL HEW	sets occupational safety and health standards, including prescriptions for warning labels, suitable protective equipment and controls; monitors employee exposure and type and frequency of employee medical examinations;

TABLE I (continued)

MAJOR FEDERAL LAWS AND AGENCIES AFFECTING CONTROL OF TOXIC SUBSTANCES AND HAZARDOUS MATERIALS

<u>STATUTE</u>	<u>AGENCY WITH JURISDICTIONAL RESPONSIBILITY</u>	<u>SUMMARY</u>
Hazardous Materials Transportation Act of 1975	DOT	designates hazardous materials and regulates their transportation; requires the registration of manufacturers and transporters of hazardous materials; regulates the transportation of radioactive materials on passenger aircraft;
Department of Transportation Act	DOT	regulates the safe transportation of hazardous materials;
Federal Railroad Safety Act of 1970	DOT	requires the establishment of standards for all areas of railroad safety; provides grant assistance to states in carrying out railroad safety programs;
Ports and Waterways Safety Act of 1972	DOT	establishes various safety measures, procedures and standards designed to prevent damage, destruction or loss of vessels, bridges or other structures on U.S. navigable waters (including vehicle traffic control, control of dangerous substances, control of safety equipment, etc.);
Deepwater Ports Act of 1974	DOT	regulates the issuance, transfer renewal, suspension and termination of deepwater port licenses; establishes environmental criteria to evaluate deepwater ports; regulates navigational safety procedures; establishes record-keeping and inspection for the filing and payment of claims for clean-up costs;

TABLE I (continued)

MAJOR FEDERAL LAWS AND AGENCIES AFFECTING CONTROL OF TOXIC SUBSTANCES AND HAZARDOUS MATERIALS

<u>STATUTE</u>	<u>AGENCY WITH JURISDICTIONAL RESPONSIBILITY</u>	<u>SUMMARY</u>
Intervention on the High Seas	DOT	provides for the removal or destruction of casualty ships and cargo which present grave and imminent danger due to oil pollutants;
Dangerous Cargo Act	DOT	stipulates extent of regulation and requirements for the transportation of explosives;
Federal Hazardous Substances Labeling Act of 1960	CPSC HEW	prohibits the introduction of misbranded or banned hazardous substances into interstate commerce; prohibits manufacture of misbranded or hazardous substances;
Poison Prevention Packaging Act of 1970	CPSC	establishes packaging standards for poison prevention; prescribes specific packaging designs, product content, package quality and labeling;
Consumer Product Safety Act Consumer Product Safety Act Amendments of 1978	CPSC	protects the public from consumer product risk or injury; requires evaluation of the safety of consumer products and develops uniform safety standards; promotes related research and investigation; requires labeling identifications of manufacturers and products;
Fair Packaging and Labeling Act	FTC HEW	regulates packaging and labeling of foods, drugs, devices and cosmetics so as to prevent consumer deception and ensure safety from hazards; requires standards for characterization of package size, placing of pricing information and labeling as to contents;

TABLE I (Continued)

MAJOR FEDERAL LAWS AND AGENCIES AFFECTING CONTROL OF TOXIC SUBSTANCES AND HAZARDOUS MATERIALS

<u>STATUTE</u>	<u>AGENCY WITH JURISDICTIONAL RESPONSIBILITY</u>	<u>SUMMARY</u>
Poultry Products Inspection Act of 1957 Wholesome Poultry Products Act of 1968	USDA	regulates the processing and distribution of poultry and poultry products in interstate and foreign commerce via inspection and labeling;
Federal Meat Inspection Act of 1967	USDA	regulates the processing and distribution of meat products in interstate and foreign commerce via inspection and labeling;
Egg Products Inspection Act of 1970	USDA	regulates the processing and distribution of eggs and egg products in interstate and foreign commerce via inspection and labeling;
Lead-Based Paint Poisoning Prevention Act of 1970 Lead-Based Paint Poisoning Prevention Act Amendments of 1973	HEW HUD CPSC	attempts to eliminate lead-based paint hazards by prohibiting its use and instigating its removal where already in use;
Federal Mine Safety and Health Act of 1977	DOL HEW	requires frequent inspection of all mines, particularly those considered especially hazardous; stringent safety standards are established for miners; strict penalties and closing guidelines are outlined;

**TABLE II**

**FEDERAL AGENCIES GIVEN JURISDICTIONAL RESPONSIBILITY**  
**BY CONGRESSIONAL LEGISLATION**  
**OVER TOXIC SUBSTANCES AND HAZARDOUS MATERIALS**

**ENVIRONMENTAL PROTECTION AGENCY**

Toxic Substances Control Act of 1976  
Federal Environmental Pesticide Control Act of 1972  
Federal Environmental Pesticide Control Act Amendments of 1975  
Federal Environmental Pesticide Control Act Amendments of 1978  
Resource Conservation and Recovery Act of 1976  
Federal, Food, Drug and Cosmetic Act  
Federal Water Pollution Control Act Amendments of 1972  
Clean Water Act of 1977  
Safe Drinking Water Act of 1974  
Clean Air Act of 1970  
Clean Act Act Amendments of 1977  
Marine Protection, Resources and Sanctuaries Act of 1972

**DEPARTMENT OF TRANSPORTATION — U.S. COAST GUARD**

Ports and Waterways Safety Act of 1972  
Deepwater Ports Act of 1974  
Intervention on the High Seas  
Dangerous Cargo Act  
Marine Protection, Resources and Sanctuaries Act of 1972  
Federal Water Pollution Control Act Amendments of 1972  
Clean Water Act of 1977

**DEPARTMENT OF TRANSPORTATION — MATERIALS TRANSPORTATION BUREAU**

Hazardous Materials Transportation Act of 1975  
Department of Transportation Act

**DEPARTMENT OF TRANSPORTATION — FEDERAL RAILROAD ADMINISTRATION**

Federal Railroad Safety Act of 1970  
Department of Transportation Act

TABLE II (continued)

**DEPARTMENT OF TRANSPORTATION — FEDERAL AVIATION ADMINISTRATION**

Clean Air Act of 1970  
Clean Air Act Amendments of 1977

**DEPARTMENT OF LABOR — OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION**

Occupational Safety and Health Act of 1970

**DEPARTMENT OF LABOR — MINE SAFETY AND HEALTH ADMINISTRATION**

Federal Mine Safety and Health Act of 1977

**DEPARTMENT OF HEALTH, EDUCATION & WELFARE — FOOD & DRUG ADMINISTRATION**

Federal Food, Drug and Cosmetic Act  
Federal Hazardous Substances Labeling Act of 1960  
Safe Drinking Water Act of 1974  
Fair Packaging and Labeling Act

**DEPARTMENT OF HEALTH, EDUCATION & WELFARE — NATIONAL INSTITUTE OF  
OCCUPATIONAL SAFETY & HEALTH**

Occupational Safety and Health Act of 1970  
Federal Mine Safety and Health Act of 1977

**DEPARTMENT OF HEALTH, EDUCATION & WELFARE — CENTER FOR DISEASE CONTROL**

Safe Drinking Water Act of 1974

**DEPARTMENT OF HEALTH, EDUCATION & WELFARE — DIVISION OF TOXICOLOGY**

Lead-Based Paint Poisoning Prevention Act of 1970  
Lead-Based Paint Poisoning Prevention Act Amendments of 1973

**DEPARTMENT OF COMMERCE — NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION**

Marine Protection, Resources and Sanctuaries Act of 1972

**DEPARTMENT OF AGRICULTURE — FOOD SAFETY AND QUALITY SERVICE**

Poultry Products Inspection Act of 1957  
Wholesome Poultry Products Act of 1968  
Egg Products Inspection Act of 1970  
Federal Meat Inspection Act of 1967

**TABLE II (continued)**

**DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT — OFFICE OF NEIGHBORHOODS,  
VOLUNTARY ASSOCIATIONS AND CONSUMER PROTECTION**

**Lead-Based Paint Poisoning Prevention Act of 1970**

**Lead-Based Paint Poisoning Prevention Act Amendments of 1973**

**DEPARTMENT OF THE ARMY — CORPS OF ENGINEERS**

**Marine Protection, Resources and Sanctuaries Act of 1972**

**Federal Water Pollution Control Act Amendments of 1972**

**Clean Water Act of 1977**

**CONSUMER PRODUCT SAFETY COMMISSION**

**Consumer Product Safety Act**

**Consumer Product Safety Act Amendments of 1978**

**Federal Hazardous Substances Labeling Act of 1960**

**Poison Prevention Packaging Act of 1970**

**Lead-Based Paint Poisoning Prevention Act of 1970**

**Lead-Based Paint Poisoning Prevention Act Amendments of 1973**

**FEDERAL TRADE COMMISSION**

**Fair Packaging and Labeling Act**

**FEDERAL MARITIME COMMISSION**

**Federal Water Pollution Control Act Amendments of 1972**

**Clean Water Act of 1977**

**TABLE III**

**FEDERAL AGENCIES WITH JURISDICTION BY LAW OVER, OR SPECIAL EXPERTISE**  
**TO COMMENT UPON, TOXIC SUBSTANCES AND HAZARDOUS MATERIALS**

**TOXIC MATERIALS**

Atomic Energy Commission (radioactive substances)  
Department of Agriculture  
    Agricultural Research Service  
    Consumer and Marketing Service  
Department of Commerce  
    National Oceanic and Atmospheric Administration  
Department of Defense  
    Nuclear and Chemical Agency  
Department of Health, Education and Welfare  
Environmental Protection Agency  
Federal Emergency Management Agency  
Nuclear Regulatory Commission

**FOOD ADDITIVES AND CONTAMINATION OF FOODSTUFFS**

Department of Agriculture  
    Consumer and Marketing Service (meat and poultry products)  
    Food, Safety and Quality Service  
Department of Health, Education and Welfare  
    Food and Drug Administration  
Environmental Protection Agency

**PESTICIDES**

Department of Agriculture  
    Agricultural Research Service (biological controls, food and fiber production)  
    Consumer Marketing Service  
    Forest Service  
Department of Commerce  
    National Oceanic and Atmospheric Administration  
Department of Health, Education and Welfare  
Department of the Interior  
    Bureau of Sport Fisheries and Wildlife  
    Bureau of Land Management (public lands)  
    Bureau of Indian Affairs (Indian lands)  
    Bureau of Reclamation (irrigated lands)  
    Fish and Wildlife Service  
Environmental Protection Agency  
Federal Emergency Management Agency

TABLE III (continued)

**TRANSPORTATION AND HANDLING OF HAZARDOUS MATERIALS**

Atomic Energy Commission  
Consumer Product Safety Commission  
Department of Commerce  
    Maritime Administration  
    National Oceanic and Atmospheric Administration  
Department of Defense  
    Armed Services Explosive Safety Board  
    Army Corps of Engineers (navigable waterways)  
Department of Health, Education and Welfare  
    Center for Disease Control  
    National Institute of Occupational Safety and Health  
Department of Housing and Urban Development  
    Office of Neighborhoods, Voluntary Associations and Consumer Protection  
Department of Labor  
    Occupational Safety and Health Administration  
    Mine Safety and Health Administration  
Department of Transportation  
    Federal Highway Administration, Bureau of Motor Carrier Safety  
    Coast Guard  
    Federal Railroad Administration  
    Federal Aviation Administration  
    Assistant Secretary for Systems Development and Technology  
    National Highway Transportation Safety Board  
    Office of Hazardous Materials  
    Office of Pipeline Safety  
Environmental Protection Agency  
Federal Emergency Management Agency  
Federal Maritime Commission  
Federal Trade Commission

**LEGISLATIVE SUMMARIES**

**Toxic Substances Control Act of 1976**

**P.L. 94-469**

**(15 USC 2601-2629)**

This piece of legislation expands federal regulation of industrial and commercial chemicals.

Pre-market testing is required for potentially dangerous chemicals. EPA is directed to require chemical manufacturers to test products that pose a risk to human health or the environment. A special committee of eight federal officials with scientific and regulatory expertise was designated to draw up a list of priority chemicals for testing to help the agency focus this effort. Companies planning to produce a new chemical or to market an existing substance for a new purpose must notify EPA 90 days in advance, giving EPA a chance to hold up marketing while more testing is done or even to ban the chemical in an extreme case. HEW is authorized to finance projects aimed at developing inexpensive and efficient methods of testing chemicals.

Other provisions require chemical manufacturers and processors to keep records and make reports to EPA. EPA is required to keep an up-to-date list of all chemicals manufactured and processed in the U.S.

If it is determined that any chemical risk can be controlled adequately under the authority of a law administered by another agency, EPA is required to give that agency 90 days to begin regulatory action.

EPA is directed to set-up and coordinate an interagency committee to collect data about toxic substances and disseminate it throughout the federal government. EPA must monitor the effect of toxic substances regulation on employment and must study the need for indemnification of companies subject to laws it administers.

The bill does not apply to foods, food additives or drugs regulated by FDA, or to pesticides regulated by EPA under a separate law. Cigarettes, firearms, and nuclear materials are also exempted. PCBs (polychlorinated biphenyls) are the one substance singled out in a provision calling for a complete ban on their manufacture and distribution by early 1979.

Authorization is given to EPA to issue subpoenas and inspect the premises and records of chemical manufacturers and processors. A civil penalty of up to \$25,000 a day is set for violations of the law and a criminal penalty for knowing or willing violations of \$25,000 a day and/or one year in prison. Private citizens and groups can sue EPA to enforce the law. Compliance with any provision of the law can be waived if the President so requests on grounds of national defense.

Clean Air Act of 1970

P.L. 91-604 (as amended, P.L. 93-15)

(42 USC 1857-1858)

This legislation authorizes the administrator of EPA to encourage research on air pollution in relation to fuels and low emission alternatives to the existing internal combustion engine. Research on the effects of air pollution agents, singly and in combinations, on public health and welfare is to be emphasized.

Each state is to be responsible for air quality within its boundaries. Each state must adopt plans for implementing, maintaining and enforcing standards and goals promulgated for each air control region within that state. EPA is to approve those plans, which must include emission requirements and schedules of compliance, provisions for monitoring devices, effective procedures to control new pollution sources, provisions for intergovernmental cooperation, adequate personnel, funding and enforcement authority and periodic inspection and testing of motor vehicles. EPA is authorized to step into areas which are not adequately covered in state plans.

EPA is to set emission standards for all potentially dangerous pollutants from new motor vehicles and engines. Engines of automobiles and other light duty vehicles, beginning with the model year 1975, must comply with standards lowering emissions of carbon monoxide and hydrocarbons by 90 percent compared with 1970 model levels. Model year 1976 standards must represent a 90 percent lower emission level of nitrogen oxide than that of the 1971 models. EPA is to conduct tests on new vehicles and engines to ensure compliance with the standards. Any sale of new cars or engines not in compliance or the removal of pollution control devices is punishable by a civil penalty of up to \$10,000.

EPA is also authorized to control or prohibit sale of any fuel or fuel additive if emissions from such would endanger public health or interfere with pollution control devices.

The law requires EPA to formulate standards for aircraft emissions. The DOT is to assist in that formulation and is to enforce them. The Federal Aviation Administration must set aviation fuel standards in consultation with EPA.

EPA is required to publish national primary and secondary air quality standards for all designated air pollutants. (Primary standards relate to public health and secondary standards relate to public welfare.)

EPA must periodically publish lists of pollutants from new stationary sources which will be subject to standards of performance. EPA is also charged with specifying and setting standards for hazardous air pollutants.

EPA may seek injunctions to stop pollution sources which endanger public health if such action is not undertaken by state or local authorities. Citizens or groups may bring suit in federal courts against EPA for failure to perform specified duties or against alleged violators.

EPA must give prior notification to both the person violating the implementation plans and the state in which the violation occurred. If corrective action is not taken, punishment can result in a fine of up to \$25,000 for each day of violation or a year in prison. Additional violations can result in a fine of up to \$50,000 per day and two years in prison. Falsifying information or tampering with monitoring devices can result in a fine of up to \$10,000 and six months in prison.

Within EPA a new Office of Noise Abatement and Control is established to study noise pollution and its effect on the public health and welfare.

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First Congressional action regarding air pollution control came in 1955 with the passage of a bill (P.L. 84-159) authorizing the Public Health Service to conduct air pollution research.

The Clean Air Act of 1963 (P.L. 88-206) increased air pollution authorizations and provided for a series of steps - culminating in legal action - that states, municipalities and the federal government could take to end interstate and intrastate air pollution (although for intrastate pollution the federal government could act only at the request of the state's governor).

A second title (P.L. 89-171) was added to the Clean Air Act in 1965 directing HEW to establish emission standards for new motor vehicles. The first standards for hydrocarbon and carbon monoxide exhaust emissions were published in 1966 and were applicable to most new gas-powered motor vehicles beginning with the 1968 model year.

The Air Quality Act of 1967 (P.L. 90-148) substantially strengthened the powers of local, state and federal authorities. It authorized HEW to designate air quality regions throughout the country. It provided full federal financing for regional control commissions to be established by state governors. It empowered HEW to enforce air quality standards in the control regions, if the states failed to adopt and implement such standards. The Act also empowered HEW to go to court to prosecute violations of standards after notice of violations. By the end of 1970, no state had full-scale standards and implementation plans in effect for any pollutants.

**Clean Air Act Amendments of 1977**

**P.L. 95-95**

**(42 USC 1857 et seq.)**

This law amends and extends the 1970 Clean Air Act. Taken together, the 1970 Act and 1977 Amendments form the nation's most complex and far-reaching environmental law. It affects virtually all industrial and transportation activity, the production and use of energy, and real estate development. Its fundamental purpose is to protect public health by cleaning the air.

This bill extends the deadline for all areas to attain national ambient air standards to December 31, 1982 (cities with especially severe oxidant and carbon monoxide problems were given an extension to December 31, 1987). The plans of states seeking extensions to 1987 must include alternative site analyses for proposed major sources of pollution, a schedule for implementing a vehicle inspection and maintenance program, and plans to improve public transportation. All revised implementation plans must contain a permit program for new or modified major facilities. Permits can be issued only if pollution offset requirements can be met or if the new source will not exceed new growth allowances.

Stationary sources which directly emit pollution can obtain delayed compliance permission from the state or EPA allowing them to continue operations temporarily even though they violated emission limitations. Penalties are designed to make noncompliance more expensive than compliance.

The legislation establishes three categories for areas having air cleaner than national ambient standards. Increments are set for the maximum allowable increases of particulates and sulfur dioxide for each of the three classes. State plans must require permits for pollution sources in clean-air areas.

The Department of the Interior and EPA are required to list all Federal Class I areas where visibility is an important value and to instigate improvement therein. States must identify the sources that impair visibility and set emission limitations based on the best available retrofit technology for each source.

Performance standards for new sources are revised. Waviers from these new source performance standards can be granted on a source-by-source basis to permit use of innovative continuous emission control technology.

The law authorizes the courts to impose civil penalties of up to \$25,000 per day for violations of the Act. Knowing violations of the delayed compliance penalty provisions were made subject to criminal sanctions.

States are directed to revise their implementation plans to meet the new requirements of the law. Plans must include air quality maintenance measures and preconstruction permit requirements. Preconstruction reviews of direct sources must include consideration of energy, environmental and economic impacts. Owners or operators of stationary sources are prohibited from making employees bear the costs of periodic shutdowns or production curtailments undertaken as supplemental or intermittent control measures.

Governors are authorized to revise the boundaries of air quality control regions within their states in order to improve management.

EPA must review criteria for ambient air quality standards at least once every five years.

The states are required to notify the public of air pollution levels exceeding primary standards and to educate the public about hazards and improvement measures.

This law provides for continuing research on the effects of various substances and activities on stratospheric ozone. EPA is authorized to regulate substances that might endanger public health or welfare because of their effect on the stratosphere.

The existing auto emission standards are delayed for two years. The standards are tightened for the 1980 models and again for 1981.

EPA can issue emergency orders in a public health emergency and is required to bring civil suit within 24 hours of such orders. Violators could be fined up to \$5000 per day.

Citizens can bring suit against sources to force compliance with emission standards or limitations, to prevent construction or modification of a major emitting facility without a permit, and to stop violation of conditions or requirements specified by the state or EPA under several provisions of the law.

The Department of Justice is given primary responsibility for controlling and supervising civil litigation involving EPA.

A National Commission on Air Quality is established to monitor and study implementation of this legislation.

The bill provides a uniform standard of proof for EPA regulation of air pollutants applied to national ambient air quality, new stationary source performance, hazardous stationary source emissions, auto emissions, regulation of fuels and additives, and aircraft emissions. EPA is authorized to regulate any future air pollution from these sources.

Federal Food, Drug and Cosmetic Act of 1938  
P.L. 75-717, as amended  
(21 USC 301-392)

The provisions of this legislation prohibit the introduction into interstate commerce of any food, drug, device, or cosmetic that is adulterated or misbranded. Similarly prohibited is the adulteration or misbranding of any of those items already in interstate commerce and all false representation of any such items. Manufacturers are required to label their food, drug or cosmetic products properly as to contents and quantity.

The Department of Health, Education and Welfare, through the Food and Drug Administration, is charged with promulgating regulations fixing and establishing reasonable definitions and standards of identity for any food, drug or cosmetic. FDA is to identify various poisonous and deleterious additive substances and to establish appropriate regulations concerning them. The Act also gives FDA authority to withdraw unsafe substances from the market, if appropriate action is not taken by the manufacturer after the presentation of official notice. Other provisions provide for FDA inspection, confiscation and destruction of substances and/or products, when necessary.

The Administrator of the Environmental Protection Agency is given authority to regulate unsafe pesticide chemicals that might be added to raw chemical commodities.

Various amendments have extended FDA's authority to include food additives (1958), color additives (1960), new drugs (1962), animal drugs and feed additives (1968) and medical devices (1976).

Violations of the provisions of the Act are punishable by a fine of \$1,000 or one year in prison or both. Second offenses are liable for a penalty of up to three years in prison or \$10,000 or both.

**Federal Water Pollution Control Act Amendments of 1972**

**P.L. 92-500**

**(33 USC 1251-1265, 1281-1292, 1311-1328, 1341-1345, 1361-1376)**

This Act's objective is to restore and maintain the chemical, physical and biological integrity of the nation's waters. It establishes as a national goal elimination of pollutant discharges into U.S. waters by 1985 and, as an interim goal, achievement of water quality safe for fish, shellfish, wildlife, and recreation by July 1, 1983. It also establishes as a national goal elimination of discharges of toxic pollutants in toxic amounts. The bill provides federal financial aid to build public waste treatment works, to develop waste treatment management plans and to undertake a major research effort to develop technology to eliminate pollutant discharges.

EPA administers the Act and develops the regulations, in cooperation with other federal, state and local agencies and industries, for comprehensive water pollution control programs.

EPA is directed to study the special water pollution problems of oil spills, marine sewage equipment (especially on small boats), pesticides, waste oil, estuary pollution, total sewage, agricultural and other rural pollution, fresh water aquatic ecosystems, river systems and thermal discharges.

EPA must identify and take steps to eliminate stationary toxic pollution sources in ports and harbors. They must set water quality related effluent limitations based on the "best available technology economically achievable." The Act prohibits discharge of radiological, chemical or biological warfare agents or high level radioactive wastes. EPA must list categories of industrial pollution sources and set national performance standards for each new source. EPA is directed to list toxic pollutants and prohibit their discharge and to set effluent limitations providing "an ample margin of safety."

EPA is given the right of entry to pollution sources and the right to inspect records and monitoring equipment and to make data public. The law authorizes criminal penalties of between \$2,500 to \$25,000 per day, or one year in prison, or both; \$50,000 per day, or two years, or both for second offenses, and civil penalties of up to \$10,000 per day.

The Act declares it to be U.S. policy that there should be no discharge of oil or hazardous substances into U.S. waters, adjoining shorelines or contiguous zone waters. Civil penalties for oil or hazardous substances discharges are set up to \$50,000 per discharge, without limit for willfull discharges. The President is required to prepare a national contingency plan for removal of oil and hazardous substances,

including the establishment of emergency task forces at major ports. Cleanup costs of discharges from vessels, onshore and offshore facilities, if not caused by an act of God, an act of war, negligence by the federal government or an act of a third party, must be paid by owners or operators.

Federal departments are required to comply with pollution control standards but the President is authorized to grant certain exemptions in the national interest.

EPA is authorized to issue permits for pollutant discharges under certain conditions and if they meet other requirements of the Act. The Act sets procedures for granting EPA permits to dump materials into the oceans or coastal waters.

The Secretary of the Army is authorized to grant permits for dumping dredged or fill material at specific disposal sites. Procedures are set for sewage sludge disposal permits.

**Clean Water Act of 1977**

**P.L. 95-217**

**(33 USC 1251 et seq.)**

**This bill amends the 1972 Federal Water Pollution Control Act.**

**It clarifies state jurisdiction over water rights. It establishes a national clearing house for information on alternative treatment.**

**Exempted by this Act from industrial cost recovery requirements are those industries discharging 25,000 gallons or less per day into municipal treatment plants as long as the effluent does not contain toxic chemicals or other materials that will contaminate or reduce the utility of the resulting sludge.**

**EPA is provided with the authority to oversee and reject any state plans for requiring use of best management practices by farmers and others whose activities indirectly pollute water through, for example, agricultural runoff.**

**The deadline for compliance with 1983 requirements for control of toxic pollutants with best available technology is extended from July 1, 1983 to July 1, 1984.**

**EPA may modify requirements for unconventional pollutants as long as the modification would not degrade the water quality, require other dischargers to upgrade controls or allow possibly toxic pollutants to enter the water supply.**

**The 65 toxics and classes of toxics derived from the NRDC v Train court decision (6 ELR 20588, D.D.C. 1976) are made the current list of toxic pollutants in water and EPA is allowed either to add or subtract from that list depending on test results.**

**EPA is allowed also to use informal rulemaking procedures to establish effluent limitations for toxic pollutants.**

**Controls on oil pollution are extended from 12 miles from shore to 200 miles from shore by making the law apply to pollution that might effect natural resources managed under the Fishery Conservation and Management Act of 1976.**

**This law removes the ceiling of \$14 million on liability for oil spill cleanup and increases the liability limit for oil spill cleanup to \$150 per gross ton for tankers, or a minimum liability of \$250,000; to \$125 per gross ton for inland barges, or a minimum of \$125,000; and to \$50 million for onshore and offshore facilities.**

**Federal Environmental Pesticide Control Act of 1972**

**P.L. 92-516**

**(7USC 136-136y)**

This bill amended the Federal Insecticide, Fungicide and Rodenticide Act of 1947 which was primarily a labeling law. This act requires all pesticides to be registered with EPA which will regulate their use.

The Act divides pesticides into two categories - general use and restricted use by qualified applicators, depending on the hazards involved. Pesticide manufacturing plants are also required to register with EPA and that agency can inspect such firms, take samples of pesticides and issue stop-sale and seizure orders if necessary.

Pesticide manufacturers and retailers are entitled to federal indemnity payments if their products are declared an imminent hazard by EPA and removed from the market. No payments will be made, however, if the pesticide owners knew in advance that their products were hazardous but still continued to use or produce them.

Registration applicants must submit detailed information on the pesticide, including labeling, claims to be made, directions on use, chemical formula and test results. The law authorizes experimental-use permits for testing. Civil penalties are set of up to \$5,000 for each offense or up to \$1,000 for pesticide applicators. Criminal penalties for manufacturers are established of up to \$25,000, or one year in prison, or both, or up to \$1,000 or 30 days in prison for private applicators.

Export pesticides must meet the laws of the foreign purchaser only. Imported pesticides must meet all U.S. standards. EPA may exempt federal or state agencies from the Act's requirements under emergency conditions.

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Pesticide is a general term for all chemical pest killers. They are divided into insecticides (insect killers), rodenticides (rodent killers), fungicides (fungus killers), miticides (mite killers) and herbicides (plant killers).

More than 80,000 pesticides products are registered with EPA. They are all made from one or more of approximately 900 basic chemical compounds.

Every formulation of a pesticide must be registered for every intended use. Consequently, many registrations are for new uses of existing products. Few new pesticide compounds have been registered in recent years.

Farmers use by far the largest volume of pesticides produced in this country, but about half of the registered pesticide products are intended for house, institutional or industrial use. All sterilizing, disinfecting, sanitizing, germicidal and bacterial killing chemicals - except those sold exclusively for use in or on the living bodies of humans or animals - are classified as pesticides and must be registered.

Among the major types of chemical pesticides are:

- \* Chlorinated hydrocarbons, or organochlorides - "hard" pesticides, which break down chemically quite slowly and can remain in the environment for some time. Pesticides of this type include: DDT, DDD, DDE, dieldrin, chlordane, toxaphene, aldrin, endrin, and heptachlor.
- \* Organic phosphates, or organophosphates - not persistent in the environment, but highly toxic to human beings. They include: parathion, malathion, chlorethion, thimet, phosdrin, methylparathion and trichlorphone.
- \* Pyrethrins - natural or botanical insecticides essentially non-toxic to warm-blooded animals.
- \* Carbamates - of low toxicity to human beings.
- \* Dessicants - kill insects by penetrating and drying up and kill plants by causing leaves to dry out and fall.
- \* Plant Regulators - produce seedless fruits and vegetables, cause plants to mature uniformly or prevent premature dropping of fruit.

**Federal Environmental Pesticide Control Act Amendments of 1975**

**P.L. 94-140**

**(7 USC 136 note)**

These amendments extend the Pesticide Regulation program through March 1977. They extend the deadline for final EPA regulations on registration and reclassification of pesticides and implementation of restrictions on use of dangerous pesticides.

EPA must notify the Secretary of Agriculture before acting publically to suspend, cancel or change the classification of a pesticide registered for use under the law. Such notification must include an analysis of the impact the action would have on agricultural production and prices, and the agricultural economy in general. EPA can waive this notification requirement when it must suspend or cancel a pesticide to prevent an "imminent hazard to human health."

EPA and the states, in cooperation with the Agriculture Department's Extension Service, must provide interested individuals with instructional materials on integrated pest management.

EPA is to consult with the agriculture secretary or governor of a state on requests for emergency exemptions from the pesticide law.

EPA is barred from regulating certain pesticides that are also used as animal drugs and that are thus regulated by the Food and Drug Administration.

**Federal Environmental Pesticide Control Act Amendments of 1978**

**P.L. 95-396**

The revisions of this legislation make it easier for farmers to find effective pesticides on the market. EPA is authorized to simplify registration of pesticides according to their chemical composition instead of by their product name, a change known as "generic" registration.

States are given new authority to enforce controls on pesticides.

The public is given access to information about the effect of a pesticide on human health and the environment.

**Safe Drinking Water Act of 1974**

**P.L. 93-523 (as amended, P.L. 95-190)**

**(42 USC 201, 300f-300j9)**

Under the provisions of this legislation, EPA is authorized to set national standards for safe drinking water. EPA must establish minimum allowable levels for contaminants in drinking water and must identify specific treatment techniques for each contaminant.

Principal power of enforcement of the standards is given to the states. EPA is allowed to bring civil suits to force corrections of any violations.

The law directs EPA to establish regulations for state programs protecting underground water sources. That agency is also given authority to deal immediately with drinking water emergencies, including allocating treatment chemicals.

EPA was also directed to conduct a six-month survey of chemicals suspected of causing cancer in drinking water.

**Marine Protection, Resources and Sanctuaries Act of 1972**

**P.L. 92-532 (as amended, P.L. 94-62)**

**(33 USC 1401, 1402, 1411-1421, 1441-1444)**

This legislation prohibits the transportation out to sea or dumping into the territorial waters or contiguous zones (the area outside the coastal zone but within the 12 mile territorial limit) of any radiological, chemical or biological warfare agent or any high level radioactive waste. Federal employees or agencies are prohibited from transporting such materials from outside the U.S. for dumping into the ocean.

The Environmental Protection Agency is authorized to issue permits for the transportation out to sea and dumping of waste materials, if it would not unreasonably endanger human health and welfare or the marine environment. Permits are required to designate the type and amount of material to be dumped, dumping location, permit expiration date and other information.

The Act authorizes the Army Corps of Engineers to issue permits for the transportation out to sea and dumping of dredged or fill material, under similar restrictions contained in EPA permits. In appropriate circumstances EPA may exercise veto power over Corps of Engineers' permits.

Civil penalties can be levied of up to \$50,000 after notice and opportunity for public hearings. Criminal penalties can be assessed of up to \$50,000 or a year in prison or both. Each day of violation is to be considered a separate offense. Exempted from these penalties are emergency dumpings to safeguard life at sea. EPA and the Army are directed to enforce this Act, with the help of the Coast Guard for surveillance and enforcement of the transportation provisions.

The Secretary of Commerce is directed to initiate a comprehensive and continuing program of monitoring and research on ocean dumping and dumping into the coastal waters or the Great Lakes.

The Secretary of Commerce, after consultation with the Secretaries of State, Defense, Interior, Transportation, the EPA Administrator and the governors of adjacent states, is to designate marine sanctuaries in coastal waters as far seaward as the outer edge of the continental shelf.

**Resource Conservation and Recovery Act of 1976**

**P.L. 94-580**

**(42 USC 6901-6907 et seq.)**

This bill amends the 1965 Solid Waste Disposal Act (P.L. 89-272) which was strengthened by the Resources Recovery Act of 1970 (P.L. 91-512). These titles reflect the growing sophistication of solid waste concerns - from simple disposal to recycling to conservation.

EPA is directed to establish an Office of Solid Waste to administer this law.

The law requires EPA to issue regulations defining the term hazardous waste and listing specific hazardous wastes. (A "hazardous waste" is defined as a solid waste which because of its quantity, concentration, or physical, chemical or infectious characteristics may cause an increase in mortality or illness or pose a hazard to human health or the environment when improperly treated, stored, transported, managed or disposed of on land and water.) All solid waste handlers (manufacturers, transporters, etc.) must notify the agency of their operations. States may petition EPA to add a substance to the hazardous waste list.

EPA must issue regulations setting safety standards for producers and transporters of hazardous wastes and for operators of hazardous waste treatment, storage or disposal facilities. These regulations must include record keeping, reporting, storage, labeling and disposal. EPA must also issue regulations requiring permits to operate hazardous waste treatment, storage or disposal facilities.

States are authorized to take over administration of the permits and safety requirements after they have set up appropriate hazardous waste programs.

A civil penalty is established of up to \$25,000 a day for hazardous waste violations that take place after state or federal compliance deadlines. A criminal penalty is levied of up to \$25,000 a day and/or one year in prison for knowing violations. EPA may seek a court injunction to control a hazardous waste that presents an imminent danger to health or the environment.

EPA must publish guidelines identifying areas with common solid waste management problems and guidelines for state solid waste management plans. The law establishes a timetable for states to develop state or regional solid waste management plans. To gain EPA approval, a plan is required to phase out all open dumps within five years and to ensure that all solid waste be recycled or disposed of safely.

EPA, in cooperation with other federal agencies, is directed to provide financial aid to government agencies and private firms for research and demonstration projects

on solid waste - including experimental plants producing fuel from solid waste. Projects involving fuel are to be coordinated with those of the Energy Research and Development Administration (ERDA).

Government agencies are required to purchase items composed of the highest possible percentage of recycled materials consistent with reasonable price and performance. They are also directed to use fuel generated from recovered materials as often as possible.

The Commerce Department is directed to encourage commercialization of resource recovery technology and to publish guidelines for classifying recoverable materials.

Occupational Safety and Health Act of 1970

P.L. 91-596

(29 USC 553, 651-678)

The provisions of this legislation require employers to furnish a workplace free from recognized hazards that have caused or are likely to cause death or serious physical harm to employees.

It requires the Secretary of Labor to promulgate national consensus safety standards and established federal safety standards. It requires the posting of labels or warnings to apprise employees of safety and health dangers to which they are exposed. DOL is charged with establishing emergency standards when employees are exposed to grave dangers from toxic materials or new hazards.

Federal inspections of working conditions are authorized. Federal inspectors may issue citations if standards are violated. DOL is required to petition a U.S. District Court to issue an order restraining any practices in a plant where an imminent danger exists to employees. This Act assesses a civil penalty of not more than \$10,000 for each willfull or repeated violation of the Act, a penalty of not more than \$1,000 for a serious violation of the Act, and a penalty of not more than \$10,000, or six months imprisonment, or both, for any employer who willfully violates any standard if the violation resulted in an employee death. The penalties are doubled after the first conviction.

The Act also establishes the National Institute for Occupational Safety and Health (NIOSH) within the Department of Health, Education and Welfare to conduct research on job safety.

**Hazardous Materials Transportation Act of 1975**  
**P.L. 93-633 (as amended, P.L. 95-363)**  
**(49 USC 1471, 1472, 1655, 1801-1812)**

The Secretary of Transportation is authorized by this legislation to issue regulations for the safe shipment of hazardous materials.

DOT can require registration by persons who ship hazardous materials or who manufacture containers for shipping such materials. The carrying of radioactive materials on passenger airlines is curtailed, except for short-lived materials used for medical treatment or research.

Civil penalties are set of up to \$10,000 for each violation of the regulations by a shipper or container manufacturer. Criminal penalties for willful violations of the regulations can result in a fine of up to \$25,000 or five years in prison.

Pipelines regulated under the Natural Gas Pipeline Safety Act of 1968 are excluded from DOT's regulations for shipment of hazardous materials. State and local requirements that are inconsistent with federal regulations for transporting hazardous material are pre-empted. Firearms and ammunition transported for personal use are also excluded.

The National Transportation Safety Board is removed from DOT and established as an independent agency with a directive to study accidents in aviation, highway traffic, rail transportation and pipelines.

DOT has the authority to set hazardous materials transportation regulations, but the enforcement is left to the appropriate administration — Federal Railway Administration, Federal Aviation Administration, Federal Highway Administration.

The law also directed DOT to issue specific regulations governing the rail transportation of explosives.

**Department of Transportation Act**  
**P.L. 89-670, as amended**  
**(49 USC 312, 1651-1659)**

This bill establishes a Cabinet-level Department of Transportation bringing together major federal agencies and functions involving safety and promotion in the aviation, highway, railway and pipeline sectors, and the U.S. Coast Guard. Not all federal transportation activities are brought into this Department. Not included are economic regulatory and rate-setting functions, urban transportation activities (Department of Housing and Urban Development) and the Maritime Administration (Department of Commerce).

**Federal Railroad Safety Act of 1970**

**P.L. 91-458 (as amended, P.L. 93-90, P.L. 94-348)**

**(45 USC 431-441)**

This Act directs the Secretary of the Department of Transportation to prescribe safety regulations supplementing provisions of law and to conduct research and development in all areas of railroad safety.

The DOT is directed to provide local law enforcement and firefighting officials, as well as shippers and carriers, with information dealing with transport emergencies.

DOT is to establish facilities and technical staff to study the problems of shipping hazardous materials by all modes of transportation. The Act authorizes DOT to take measures to ensure greater safety in the transport of such materials.

Civil penalties are established of \$250 to \$2500 per violation of safety regulations. DOT has emergency powers to stop the use of any unsafe equipment or facility. The Act also allows DOT to seek injunctions to enforce safety rules and to assess civil penalties.

**Ports and Waterways Safety Act of 1972**

**P.L. 92-340**

**(33 USC 1221-1227)**

The Department of Transportation is authorized by this legislation to establish comprehensive regulations for the design, construction, operation and maintenance of vessels carrying bulk cargoes for the purpose of protecting the marine environment. ("Bulk cargoes" are defined as materials such as flammable or combustible liquids, oil of any kind, hazardous polluting liquids. Bulk dry cargoes are excluded from the provisions of the Act.)

DOT is authorized to establish and operate marine traffic systems and controls for congested waterways and to prescribe safety equipment and procedures for docks and other structures.

This bill provides a maximum civil penalty of \$10,000 and criminal penalties of not less than \$5,000 nor more than \$50,000, or 5 years imprisonment, or both, for violations of the Act.

**Deepwater Ports Act of 1974**

**P.L. 93-627**

**(33 USC 1501-1524)**

The Secretary of Transportation is authorized to issue licenses to own, construct and operate deepwater ports to be used for the transfer of oil to the U.S. Such ports are to be in the national interest, will not unreasonably interfere with other uses of the high seas and will involve use of the best available technology.

No license can be issued if EPA finds that the deepwater port would not conform to the provisions of the Clean Air Act, the Federal Water Pollution Control Act or the Marine Protection, Research and Sanctuaries Act. DOT must establish environmental review criteria to evaluate deepwater ports in accordance with recommendations from EPA and the National Oceanic and Atmospheric Administration. DOT must issue and enforce regulations for marine environmental protection and navigational safety. Maximum penalties for violations are set at \$25,000 for each day of violation and/or one year's imprisonment.

The owner and operator of a vessel that discharged oil while operating in a safety zone around a deepwater port or after leaving a deepwater port where it received oil from another vessel is liable, without regard to fault, to cleanup costs and damages of up to \$150 per gross ton of the vessel or \$20 million, whichever is less. The licensee of the deepwater port is liable, without regard to fault, for cleanup costs and damages up to \$50 million for discharges that emanated from a deepwater port or a vessel moored to a deepwater port.

This bill provides maximum penalties of \$10,000 in fines and/or one year's imprisonment for failure to report oil spills. It establishes a \$100 million Deepwater Port Liability Fund to be financed by user charges of two cents a barrel, to pay cleanup costs and damages in excess of the liability limits.

**Intervention on the High Seas**

**P.L. 92-248**

**(33 USC 1471-1487)**

This bill authorizes the Secretary of Transportation, through the Coast Guard, to take measures to prevent, mitigate or eliminate grave and imminent danger to the U.S. coastline from oil pollution or the threat of oil pollution caused by ocean shipping.

In an emergency situation the Coast Guard would be authorized to destroy any ship and cargo that severely endangered, or was damaging, the coastline. In most cases an elaborate system of consultations would be undertaken before any unilateral action.

This legislation was enacted to implement the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties of 1969.

**Dangerous Cargo Act**

**P.L. 82-562**

**(46 USC 170, 465)**

This legislation relaxes restrictions on shipping explosives. It was designed to help Hawaii and Alaska meet their needs for commercial explosives by allowing local authorities to fix their own regulation.

The Department of Transportation is charged with regulating transportation of explosives and of coordinating and monitoring local regulatory efforts.

**Federal Hazardous Substances Labeling Act of 1960**

**P.L. 86-613**

**(15 USC 1261-1273)**

This bill requires that the label of any hazardous substance suitable for household use carry: the name and address of the manufacturer, packer or seller; name of the hazardous ingredient; a signal word, "Danger," "Warning" or "Caution;" a statement of the hazard; precautionary measures and first-aid treatment if necessary; the word "poison" on any highly toxic substance; handling or storage instructions; and the statement "Keep out of the reach of children," or its practical equivalent.

It defines hazardous substances to include those which, under specified conditions, are toxic, highly toxic, corrosive, irritants, strong sensitizers, flammable or generating pressure through decomposition or heat. It also authorizes inspection of any such substance.

HEW is authorized to enforce the Act and levy the provided penalties for non-compliance with the Act's provisions.

This legislation repeals the Federal Caustic Poison Act, but is not to interfere with substances subject to the provisions of the Federal Food, Drug and Cosmetics Act.

**Poison Prevention Packaging Act of 1970**

**P.L. 91-601 (as amended)**

**(15 USC 1261, 1471-1476)**

The Department of Health, Education and Welfare is authorized by this bill to establish regulations for special packaging of substances dangerous to children. HEW is mandated to prohibit any type of package determined as unnecessarily attractive to children. Manufacturers are required by HEW to market their dangerous products in safety containers.

Violations of this packaging law are subject to penalties contained in the Hazardous Substances Act, The Insecticide, Fungicide and Rodenticide Act, and the Food, Drug and Cosmetic Act.

**Consumer Product Safety Act**

**P.L. 92-573**

**(15 USC 2051-2081)**

This bill establishes an independent five-member commission to protect consumers from unreasonable product hazards. The Commissioners are appointed by the President and confirmed by the Senate.

An injury information clearinghouse is established within the Commission to collect information relating to the causes and prevention of death, injury or illness associated with consumer products and to conduct studies and investigations.

The Commission is authorized to conduct safety studies and tests of consumer products. It is also directed to promulgate mandatory safety standards to prevent or reduce unreasonable risk of injury associated with consumer products. The standards must relate to performance, composition, content, design, construction, finish or packaging of the product and to warnings and instructions for use. The Commission may ban a consumer product if it determines that the product presents an unreasonable hazard and no safety standard would adequately protect the public from that hazard.

The Commission can prohibit a manufacturer from stockpiling a product before a safety standard becomes effective. The Commission is further authorized to require manufacturers to furnish notice and a description to the Commission of any new consumer product before marketing. Manufacturers must certify that a product meets all applicable safety standards. The Commission has the authority to test products for compliance and to investigate factory facilities.

The Commission can also require labels for consumer products, carrying the date and place of manufacture, the name of the manufacturer and certification of compliance with safety standards.

Imported consumer products must meet safety requirements applicable to domestically produced consumer goods, but products labeled for export are exempted from compliance.

Civil penalties of \$2,000 for each violation are set, with the maximum amount of \$50,000. Criminal penalties are assessed at \$50,000 or a year in prison, or both, if a person continues to violate the law after being informed of non-compliance.

This Act transfers to the Commission the functions, orders and regulations under the Federal Hazardous Substances Act, the Poison Prevention Packaging Act, the Flammable Fabrics Act and the Refrigerator Safety Act.

The CPSC is prohibited from having any authority to regulate tobacco products, firearms, motor vehicles, pesticides, aircraft, boats regulated by the Federal Boat Safety Act of 1971, drugs, cosmetics and food. The Commission is also prohibited from issuing regulations on products that can be regulated under the Occupational Safety and Health Act of 1970, the Atomic Energy Act of 1954, the Clean Air Act of 1963, or certain products emitting electronic radiation.

**Consumer Product Safety Act Amendments of 1978**

**P.L. 95-631**

**(15 USC 2051-2081)**

**These amendments extend the life of the CPSC for three years.**

**Manufacturers are required to give the CPSC advance notice of the export of any product, substance or fabric not in compliance with an existing safety standard and the CPSC is required to notify the appropriate foreign governments of the hazard associated with the exported product.**

**A Toxicological Advisory Board is established to provide the CPSC with technical assistance on first-aid instructions contained in labels on toxic household products.**

**The CPSC is authorized to make existing voluntary product safety standards mandatory, and to delay imposition of a mandatory standard in order to permit an industry to develop its own voluntary standard.**

**Fair Packaging and Labeling Act**

**P.L. 89-755**

**(15 USC 1451-1461)**

The Secretary of Health, Education and Welfare (for foods, drugs and cosmetics) and the Federal Trade Commission (for other commodities) is directed to require clear labeling of packages including identification of the contents and the manufacturer and a uniform statement of net quantity on the principal display panel of the label.

Other provisions require ingredient information in order of their decreasing predominance.

**Poultry Products Inspection Act of 1957**

**P.L. 85-172**

**(21 USC 451-469)**

The Department of Agriculture is authorized to inspect poultry prepared and sold in interstate commerce. The Act provides for compulsory post-mortem inspection on a bird-by-bird basis and for ante-mortem inspection if the Agriculture Secretary finds it necessary.

Diseased and unclean birds are barred from the market. The Department of Agriculture must set sanitary and construction standards for plants and is directed to regulate the use of chemical additives in poultry. These regulations apply to imported as well as domestically produced birds.

In addition to the interstate provisions, the Act permits the Secretary to designate "major consuming areas" which include several states (e.g., the New York Metropolitan area) and to apply federal inspection to plants in those areas.

**Wholesome Poultry Products Act of 1968**

**P.L. 90-492**

**(21 USC 451-461, 463-465, 467, 467a-467f, 470)**

This bill authorizes the Secretary of Agriculture to work in cooperation with state agencies to establish poultry inspection programs for poultry shipped intrastate, with standards for the programs equal to or higher than federal standards for inspection of poultry shipped interstate.

This program must include poultry inspection both before and after slaughter, regular inspection of facilities and personnel in the poultry business, and establishment of sanitation requirements for facilities.

Federal inspection is extended to poultry production in states which do not establish a federal level program.

It requires registration of various previously exempted segments of the poultry industry, including dealers in dead, dying, diseased and disabled poultry.

Criminal penalty provisions are established for persons convicted of violating the Act of up to \$1,000 and a year in jail or both. In cases involving attempts to defraud and involving distribution of adulterated articles, penalties are allowed of up to \$10,000 and three years in jail or both.

The Act authorizes regulation of the storage of poultry and standards for uniform labeling.

Federal Meat Inspection Act of 1967  
P.L. 90-201 (as amended, P.L. 91-342)  
(21 USC 601-623, 641-645, 661, 671-680, 690)

This bill declared it to be essential in the public interest that the health and welfare of consumers be protected by assuring that meat and meat food products distributed to them are wholesome, not adulterated, and properly marked, labeled and packaged.

This Act covers all meat products "capable of use as human food." It amends the 1907 Meat Inspection Act by modernizing definitions of what constitutes adulterated and misbranded meat and meat-derivative products. As defined by this legislation, "adulterated" includes any carcass, part of carcass, meat or meat food product which (1) bears or contains any poisonous or deleterious substance injurious to health, or (2) has had any poisonous or deleterious substance added to it (such as pesticide, food additive, or color additive).

The Secretary of Agriculture is directed to require inspection of all cattle, sheep, swine, goats, horses, mules and other equines before they can enter any slaughtering, packing, rendering or similar establishment.

**Egg Products Inspection Act of 1970**

**P.L. 91-597**

**(21 USC 1031-1056)**

The provisions of this legislation prohibit the distribution of unwholesome shell eggs and prohibit their use in food products. The Department of Agriculture is authorized to provide mandatory continuous inspection of egg product processing plants. The law requires the clear identification of egg products not intended for human consumption. The same requirements for imported eggs and egg products are established as for domestic products.

**Lead-Based Paint Poisoning Prevention Act of 1971**

**P.L. 91-695**

**(42 USC 4801, 4811, 4821, 4831, 4841-4843)**

This Act authorized the Department of Health, Education and Welfare to make grants to local governments to eliminate lead-based paint hazards. HEW is also authorized to prohibit future use of lead-based paint by the federal government in residential construction and rehabilitation projects.

The Department of Housing and Urban Development is directed to determine the extent of lead-based paint poisoning in the U.S. and methods by which the paint can be removed from residential housing.

**Lead-Based Paint Poisoning Act Amendments of 1973**

**P.L. 93-151**

**(42 USC 4801 et seq.)**

This legislation extends and broadens the federal lead poisoning prevention program.

HUD is required to establish regulations to ensure that new owners and tenants living in housing built before 1950 be notified of possible lead-based paint hazards.

HEW and HUD are required to take steps to prohibit the use of lead-based paint in residential buildings constructed or renovated with federal assistance or in any toy, drinking or eating utensil or piece of furniture distributed or manufactured after enactment of the bill.

Lead-based paint is defined as paint containing more than 0.5 percent lead by weight before December 31, 1974, or more than 0.06 percent after that date.

**Federal Mine Safety and Health Act of 1977**

**P. L. 95-164**

**(30 USC 801-804, 811-823, 833a, 824, 825, 842, 861, 878, 951-955, 958, 959, 961)**

This Act amends the Federal Coal Mine Health and Safety Act of 1969 (P.L.91-153) to apply to metal and nonmetal mining and repeals the Federal Metal and Nonmetallic Mine Safety Act of 1966 (P.L. 89-577).

The enforcement functions of the Mining Enforcement and Safety Administration (MESA) are transferred from the Department of the Interior to the Department of Labor. Such responsibilities are placed within a new office called the Mine Safety and Health Administration, separate from the Occupational Safety and Health Administration (OSHA).

Health research functions are left in the Department of Health, Education and Welfare. Mine safety research is left under the jurisdiction of the Interior Department.

Stiffer standards are required on toxic substances. Operators are required to examine miners periodically for adverse effects of exposure and reassign them to less hazardous duties if necessary.

At least four announced federal inspections of each underground mine are required every year. Two unannounced inspections of each surface mine every year are likewise required. In addition, one spot inspection of especially hazardous or gassy mines must be undertaken every five working days.

Miners are permitted through their representatives to request additional inspections and to accompany federal inspectors on their rounds. Companies are barred from retaliating against miners who file complaints, refuse to work under unsafe or unhealthful conditions or participate actively in any aspect of the enforcement process.

The bill orders the issuance of written citations for violations of health and safety regulations, specifying a deadline for corrective action. The closing of a mine is required where there is imminent danger or a "pattern of violations." Operators must compensate miners for work lost during such closures.

Fines are specified of up to \$10,000 for each violation by an operator and up to \$1,000 for each day of operation in defiance of an order.

DOL is empowered to obtain court injunctions against hazardous mining activities in cases of repeated health and safety violations.

A five-member Mine Safety and Health Review Commission is established, independent of DOL, to handle disputes arising under the Act.

**Federal Disaster Relief Act of 1974**

**P.L. 93-288**

**(42 USC 3231-3236, 4401 notes, 5121 et seq.)**

Federal disaster relief programs are streamlined and expanded under this legislation. It amends the Disaster Relief Act of 1970 (P.L. 91-606) and the Public Works and Economic Development Act of 1965 (P.L. 89-136).

The President is permitted, under this legislation, to distinguish between emergencies, which would qualify state and local governments for supplementary federal assistance, and major disasters, which would call for full federal disaster assistance under the Act.

It authorizes a one-time \$250,000 grant to each state to help it develop a comprehensive disaster relief program.

It provides for a variety of other modes of assistance to states, individuals and communities to assist in disaster recovery.

## CONCLUSIONS

The present patchwork of toxic substances control statutes is the result of incremental legislation enacted principally over the last twenty years. Depending upon the method of tabulation, there are more than 30 major pieces of legislation concerned with toxic substances and their control.

Congress has passed new laws one by one as it perceived relatively narrowly defined needs for additional controls. At no point has there been a comprehensive look at the entire picture. There has not been any attempt to design a single control system that covers the complete life-cycle of a toxic or hazardous substance, from synthesis to disposal, through all the media in which it might be found. The absence of such a comprehensive approach is primarily the result of the only newly realized recognition that toxic substances are numerous and widely dispersed throughout the environment.

The Toxic Substances Control Act of 1976 (TSCA) attempted to fill the gaps in the complex of federal regulatory authority. It increases, but does not perfect, the government's authority to protect health and the environment from toxic substances hazards. The enormously complex pattern of control still remains in effect.

As a result of this complicated network, many widely used substances fall under the jurisdiction of more than one agency and law. For example, the full regulation of all sources of exposure to vinyl chloride would require action under as many as fifteen statutes administered by five agencies. Perhaps few substances will require action by so many agencies under so many statutes. However, there are many that require two or three separate control actions. The Interagency Regulatory Liaison Group (IRLG) reports that currently there are at least 23 chemical substances or groups of substances for which regulations are being developed by two or more of its four

member agencies (i.e., EPA, OSHA, CPSC, and the Food Safety and Quality Service of the Department of Agriculture).

In addition, many business activities and facilities, such as transportation and factories, are subject to the independent, and perhaps conflicting, requirements of multiple laws and agencies. For example, a factory working with a toxic substance can be subject to at least four separate standards governing its release: into the workplace, into the general atmosphere, into wastewater and into solid waste.

The reverse side of the coin of jurisdictional overlap is insufficient regulation. Some holes still remain within the network of regulatory statutes. As an example, Section 3 of TSCA excludes pesticides and substances regulated under the Food, Drug and Cosmetic Act (food additives, color additives, drugs, animal feed additives and drugs, medical devices and cosmetics) from the definition of "chemical substances." TSCA's premarket safety testing requirements do not apply to these substances. While pesticides and most of the other FDCA substances are subject to premarket testing under other laws, cosmetics are not, and there is no adequate authority for assuring that the safety of cosmetic ingredients is substantiated.

This jurisdictional coordination problem exists within individual agencies as well as among them. EPA, for example, administers provisions of at least twelve separate laws affecting toxic substances control. There are at least four discrete program areas within FDA, and at least three within DOT, that deal with the control of toxic substances. Instances of within-agency jurisdictional conflict and duplicative or inconsistent action are as serious as those exhibited among agencies.

The dilemmas of jurisdictional fragmentation create the potential for resource-consuming "border-problem" squabbles. Perhaps more often, but less visibly, agencies are encouraged to wait for sister agencies to regulate a hazard. When more than one agency has decided to study or regulate a substance, it can result in needless duplication of research and hearings. The fragmentation also encourages protracted

jurisdictional litigation both by industries desiring to be regulated under a less stringent statutory mandate, and by public interest organizations desiring regulations under a more stringent statutory one.

Another problem is that agencies which share jurisdictional responsibility for a particular substance can differ on the relative weight that should be given to hazardous risks and benefits (e.g., EPA and USDA regarding pesticides). Fundamental differences in value judgements and legislative and regulatory premises are inherent in the subject matter of toxic substances and form boundaries for government action. Past decision making has not always been specific and explicit and that has contributed to the uncertainty and value conflict. It is impossible to eliminate these differences completely, however, and it is these that make the control of toxic substances so difficult and challenging a task. This analysis does not necessarily suggest that efforts to quantify more precisely potential risks and benefits will result in better regulation and in appreciable improvement for the common good. Maybe the tension and pull, with its attendant ambiguity, is the best course. The most serious adverse consequences of differing assessments of a substance's benefits and risks are the possibilities of under-weighting risks and overstating benefits.

The agencies have at their command a valuable tool for improving coordination—the interagency agreement on jurisdictional issues and joint responsibilities. This tool remains to be used to the best advantage of toxic substances and hazardous materials control.

The pattern of federal regulation of toxic substances has been to afford high priority to substances and hazards about which a great deal is known. That is only natural, especially if the substance has received notoriety in the public and scientific communities. (Vinyl Chloride is a good example.) However, attention is thus taken away from research and regulation of less familiar, yet equally, or even more, dangerous substances.

One of the major challenges facing the federal agencies is the tremendous number of chemicals needing regulatory attention. There are more than 70,000 chemicals currently in commercial use. NIOSH lists approximately 13,000 chemicals in current use for which there is some evidence of toxicity. At least 1500 to 2000 chemicals are suspected carcinogens. And as if the number of existing chemicals is not a sufficient problem, about 3,200 new ones are introduced into commerce each year. The agencies have taken action on too few chemicals. In the 1970's OSHA had managed to set only 21 permanent standards for toxic substances. EPA has set standards for only six hazardous air pollutants and six toxic water pollutants. EPA has completed only six contested pesticide cancellations or suspensions. FDA and CPSC have similarly taken few actions against substances that cause cancer or other long-term health or environmental consequences. DOT has considered its first action of this kind, regarding the transportation of asbestos.

In fairness, it must be noted that the number of standards issued or planned under many of the programs has increased within the last few years. However, even if standards are issued at the present or anticipated rate, they will still not match the number of chemicals waiting attention. In light of that, it has been proposed that generic substances, rather than specific and individual chemicals, be used in establishing standards of regulation.

Finally, another concern arises regarding the sources of data upon which toxic and hazardous legislation and regulation are based. Much of the information on hazards and technological and economic impacts comes from the private sector. That data has the potential of reflecting the needs and concerns of the source and might not be entirely accurate and reliable. There seems to be a trend toward generating more reliable data, but the existing state of affairs must be understood in light of its sources.

All of the above commentary indicates varying degrees of limitation inherent within the legislative control of toxic substances and hazardous materials. In as much as the entire field of concern has significant potential for contributing to the creation of an "emergency situation," the limitations outlined need to be viewed as dangers according to their respective level of importance.

This study shows that the existing legislative effort to control toxic substances and hazardous materials is motivated by many different concerns, from many diverse sources, at many different times. Similarly, the legislation is implemented by a variety of agencies and agency sub-divisions, resulting in a complex network of procedural and interpretive patterns.

In light of this noted complexity, it is not unfounded to assume that the state of agency contingency plans for dealing with emergency situations developing from toxic substances and hazardous materials is, at best, equally complex and, at worst, effectively meaningless.

Research for this project has shown that section 504 of the Clean Water Act authorizes EPA to respond to almost any environmental emergency including ones on land as well as water, where response is not encompassed by any other federal authority. A study of the implementation of that authorization and of other jurisdictionally responsible agencies' emergency procedures for potential toxic and hazardous materials disasters would certainly be in order. The volatile nature of toxic substances and hazardous materials demands effective and efficient emergency contingency planning. The fragmentation of the regulation of their control is not a viable excuse for the absence of such planning. The Michigan PCB episode and that of the Love Canal in New York stand as clear warnings.

Although Federal legislation, regulation and planning may be pervasive, stringent and all encompassing, it is still removed in varying degrees from the local implementation level. In an emergency situation, local officials are the first on the scene and

are joined by Federal authorities, if the situation warrants, only after initial action has been taken. In the case of toxic substances and hazardous materials, initial reactions and decisions can be especially important and crucial. Local authorities need to be familiar with procedures for coping with toxic and hazardous emergencies. The development of a training program for local officials in this area should be coordinated with the localities through the National Fire Prevention and Control Administration.

This study concludes with the note that it represents only the tip of the iceberg of the toxic substances and hazardous materials issue. Deliberate, expanded and coordinated planning, research and regulation must remain a high priority.

