Summaries of Major Environmental Laws

The most complete source for federal environmental laws is the Environmental Protection Agency's web site: www.epa.gov.

Click "laws and regulations"
Click "laws and executive orders"

You can also find policies, guidance documents and other references.

For a reasonably-sized summary of the major laws, go to www.smallbiz-enviroweb.org, a web site funded by EPA to provide resources for small businesses.

Click "environmental compliance"
Click "major environmental laws"

These summaries are a good start to get a basic overview of what a statute does, and the major statutes are set out below. Each site has multiple additional sources, including some plain English versions, for whatever level of detail you seek. From the www.smallbiz-enviroweb.org web site:

Summaries of Major Environmental Laws/Regulations

- Clean Air Act (CAA)
- Clean Water Act (CWA)
- Safe Drinking Water Act (SDWA)
- Resource Conservation and Recovery Act (RCRA)
- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
- Emergency Planning and Community Right-to-Know Act (EPCRA)
- Oil Pollution Act (OPA)
- Pollution Prevention Act (PPA)
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)
- Occupational Safety and Health Act (OSHA)

Clean Air Act Amendments of 1990

The Clean Air Act (CAA) of 1963 and its amendments, including the extensive Clean Air Act Amendments (CAAA) of 1990, aim to "protect and enhance the nation's air resources so as to promote the public health and welfare and the productive capacity of the population." Currently, the CAA regulates more than 380 pollutants, including:

- Criteria pollutants--SO_2, NO_x, CO, VOCs, PM-10, Lead, Ozone
- New Source Performance Standards (NSPS) pollutants, including H_2S, TRS, H_2SO_4, Mist, Fluorides, TSP
- 188 Hazardous Air Pollutants (HAPs)
- 139 Extremely Hazardous Substances (final) under the Accidental Release Program, Ammonia, Hydrogen Sulfide, Bromine, Sulfur Trioxide, others to be promulgated
- Ozone depleting substances (Class I and II), including CFCs, Halons, HCFCs, Carbon Tetrachloride (also HAP), Methyl Chloroform (also HAP), and Methyl Bromide.

The CAA consists of nine sections, or Titles, covering National Ambient Air Quality Standards, Mobile Sources, Air Toxics, Acid Rain, Permitting, CFCs, Enforcement Issues, Miscellaneous Topics, and Research. Most significant are Titles I, III, IV and V.

Under **Title I**, EPA established National Ambient Air Quality Standards (NAAQSs) to limit levels of "criteria pollutants," including carbon monoxide, lead, nitrogen dioxide, particulate matter, volatile organic compounds, ozone, and sulfur dioxide. Geographic areas that meet NAAQSs for a given pollutant are classified as attainment areas; those that do not meet NAAQSs are classified as non-attainment areas. Additionally, each state must develop a State Implementation Plan to identify sources of air pollution and determine what reductions were needed to meet Federal air quality standards. Title I also authorizes EPA to establish New Source Performance Standards, nationally uniform emission standards for new stationary sources in particular industrial categories.

Title III greatly expanded programs directed at hazardous air pollutants(HAPs) under the National Emission Standards for Hazardous Air Pollutants (NESHAPs), nationally uniform standards oriented towards controlling particular hazardous air pollutants (HAPs). Title III initially included a list of 189 compounds or groups of compounds that were designated as hazardous. This list included all seven pollutants previously regulated under the NESHAP regulations. Provisions under this Title allow EPA to add and delete pollutants from this list. One pollutant has been dropped from the original list of 189. Emission controls requirements for HAPs are based on termed maximum achievable control technology (MACT).

Under **Title IV**, sulfur dioxide and nitrogen oxides are considered to be the two principal precursors responsible for acid rain related environmental problems. Title IV requirements focus on large stationary source combustion systems, primarily electric utilities, as they are major sources of these two pollutant categories. Under Title IV, energy conservation, clean coal technology, and the cap and trade program will be utilized to reduce acid rain. The acid rain program also includes a reduction in nitrogen oxides emissions be accomplished without the aid of the cap and trade program. NO_x limits are determined on a case-by-case basis.

Under the **Title V** operating permit program, all air requirements for a facility are included in one “umbrella” permit that covers all major stationary sources including those subject to: New Source Performance Standards (NSPS), major HAP sources, New Source Review/ Prevention of Significant Deterioration sources, acid rain sources, and municipal waste incinerators. The program will be administered by state and local permitting agencies. Eventually, nearly all sources, including minor emissions sources, will be required to apply for and obtain permits under the new program. At a minimum, states must include the following requirements in their programs: permit applications, emissions monitoring data, compliance certification, permit fees, personnel and funding, and permitting authority.

EPA Office of Air and Radiation
Plain English Guide to the Clean Air Act
Clean Air Act Compliance Assistance

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA), which amended the Solid Waste Disposal Act, established regulations to manage the generation, transport, treatment, storage, and disposal of hazardous wastes while simultaneously ensuring the protection of human health and the environment. Subtitle C of the statute addresses the potential for contamination from the point of waste generation to the point of final disposal or destruction (“cradle-to-grave”). Subtitle D of RCRA contains less restrictive requirements for nonhazardous solid waste. Most RCRA requirements are not industry-specific; rather they apply to any company that transports, treats, stores, or disposes of hazardous waste.

RCRA has been amended several times, most importantly by the Hazardous and Solid Waste Amendments of 1984 (HSWA). Under HSWA, RCRA became focused on waste minimization and a national land disposal ban program with the following objectives:

- Proper hazardous waste management
- Waste minimization
- Reduction in land disposal practices
- Prohibition of open dumping
- Encouragement of state authorized RCRA programs
- Encouragement of research and development
- Encouragement of recovery, recycling, and treatment alternatives.

HSWA also added Subtitle I which imposed management requirements for underground storage tanks that contain petroleum or hazardous substances. Subtitle I includes requirements for tank notification interim prohibition, new tank standards, reporting and recordkeeping requirements for existing tanks, corrective action, financial responsibility, compliance monitoring and enforcement, and approval of state programs. In 1986, Congress passed the Superfund Amendments Reauthorization Act which amended Subtitle I to provide federal funds for corrective actions on petroleum releases from UST systems.

RCRA regulations first targeted large companies, which generate the greatest portion of hazardous waste. Business establishments producing less than 2,200 pounds of hazardous waste in a calendar month (known as small quantity generators) were exempted from most of the hazardous waste management regulations published by EPA in May 1980. Under HSWA, however, EPA was directed by Congress to establish new requirements that would bring small quantity generators (those who generate between 220 and 2,200 pounds of hazardous waste per calendar month) into the hazardous waste regulatory system. EPA issued final regulations for small quantity generators on March 24, 1986.

Solid wastes can be classified as hazardous if:

- They exhibit a characteristic of hazardous waste (ignitability, corrosivity, toxicity, or reactivity) and are designated with a “D” code
- They are classified as a “listed” waste, a discarded commercial chemical product from specific industries or sources and are designated with “P” or “U” codes
- They are hazardous wastes from non-specific sources and are designated with “F” codes.

The manifest system is the foundation of RCRA. The manifest documents the contents of each hazardous waste shipment and travels from the generating facility to the final disposal site.

EPA Office of Solid Waste and Emergency Response
Managing Your Hazardous Waste: A Guide for Small Businesses
EPA Office of Underground Storage Tanks
Resource Conservation and Recovery Act Compliance Assistance

Comprehensive Environmental Response, Compensation and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) was enacted by Congress on December 11, 1980 and established a federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. The focus is primarily on sites that were contaminated in the past, rather than those

currently being contaminated. (The latter sites are regulated under RCRA.) Under CERCLA, a system was established for obtaining funds from potentially responsible parties (PRPs).

Under CERCLA, anyone who has had any involvement with a hazardous waste site targeted by CERCLA could be considered a PRP and could be held responsible for all or part of the cleanup expense. Site operators, as well as hazardous waste transporters and shippers, may be required later to contribute thousands of dollars for cleanup of the disposal site used. Small businesses that ship wastes off-site for proper and legal disposal may be wise to verify the legitimacy and track record of transporters and destination disposal sites used.

CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites. It provided for liability of persons responsible for releases of hazardous waste at these sites and established a trust fund to provide for cleanup when no responsible party could be identified. Under CERCLA, two response actions could be undertaken. Short-term removals address releases or threatened releases requiring prompt response. Long-term remedial response actions permanently address and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. Long-term actions can be conducted only if a site is listed on EPA's National Priorities List (NPL).

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the NPL. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986.

EPA Office of Solid Waste and Emergency Response
One Cleanup Program
Superfund Information

Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right to Know Act (EPCRA) was enacted by Congress on October 17, 1986, in response to public concerns over the protection of the public from chemical emergencies and dangers. EPCRA was enacted as a stand-alone provision, Title III, of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and has four major parts:

- **Emergency Planning** - The emergency planning requirements are designed to develop state and local government emergency response and preparedness capabilities through better coordination and planning, especially within the local community. Facilities subject to emergency planning requirements include those with any of the 356 listed extremely hazardous chemicals on-site in a quantity equal to or greater than the established threshold planning quantity (TPQ). These facilities are to notify the state and local emergency planning commissions that they are subject to the provisions of EPCRA.
- **Emergency Notification -** Facilities that have an unplanned release of any listed extremely hazardous substance or of CERCLA hazardous substances exceeding their reportable quantity must notify the state and local emergency planning commissions immediately. Notification must be made to the local emergency planning committee (LEPC), the State emergency response commission (SERC), and the U.S. Coast Guard's National Response Center (NRC).
- **Community Right-to-Know** - The Community Right-to-Know provisions of SARA Title III are intended to increase the public's knowledge and access to information regarding the presence of hazardous chemicals in the community and releases of these chemicals into the environment.
- **Toxic Chemical Release Reporting -** Section 313 of EPCRA requires facilities to submit a reporting form (Form R or Form A) describing toxic chemical releases and certain other waste management activities. Owners and operators of certain facilities that process, manufacture, or otherwise use a listed

toxic chemical in amounts exceeding threshold quantities must report emissions of such chemicals on an annual basis.

EPA Office of Pollution Prevention and Toxics
Toxics Release Inventory web page
TRI-ME, EPA TRI Reporting Software
Emergency Preparedness and Community Right-to-know Act Compliance Assistance

Oil Pollution Act of 1990

Following the Exxon Valdez oil spill disaster in 1989, Congress signed into law the Oil Pollution Act (OPA) of 1990 to streamline and strengthen EPA's ability to prevent and respond to catastrophic oil spills. The OPA amended Section 311 of the Clean Water Act and the Federal Water Pollution Control Act and created a trust fund financed by a tax on oil to clean up spills when the responsible party is unable or unwilling to do so. The OPA requires oil storage facilities and vessels to submit to the Federal government plans detailing how they will respond to large discharges. EPA has published regulations for aboveground storage facilities; the Coast Guard has done so for oil tankers. The OPA also requires:

- **Facility Response Plan Rule** - Certain facilities that store and use oil must submit plans to respond to a worst-case discharge of oil and to a substantial threat of such a discharge.
- **Reporting Requirements** - Regulated facilities must report discharges of oil or releases of hazardous substances to EPA and/or other federal, state, and local government agencies.
- **Spill Prevention, Control, and Countermeasure (SPCC) Rule** - Certain facilities must prepare, amend, and implement SPCC Plans to address the potential for a discharge of oil to navigable waters and adjoining shorelines.
- **National Contingency Plan (NCP) Subpart J - Product Schedule** - Provides for a schedule of spill mitigating devices and substances that may be authorized for use on oil discharges.

Oil Pollution Act Overview
Oil Pollution Prevention Regulations
Finalized Amendments to the Spill Prevention, Control, and Countermeasures (SPCC) Rule (effective 1/14/10)

Pollution Prevention Act

The Pollution Prevention Act of 1990 (PPA) established a national policy that pollution prevention should be prevented or reduced at the source when feasible. Pollution that cannot be prevented should be recycled in an environmentally safe manner. As a last resort, wastes, that cannot be reduced or recycled should be treated or disposed in an environmentally safe manner. Under PPA, facilities required to report releases of toxic chemicals under EPCRA are subject to additional reporting about source reduction and recycling activities.

PPA was designed to promote voluntary source reduction of individual pollution sources through EPA regulations, grants to states for technical assistance programs, and establishment of a source reduction clearinghouse. This is in contrast with other laws that require the treatment, disposal, or recycling of waste after it has been produced. By adopting pollution prevention practices, businesses could potentially realize cost savings and improved regulatory compliance.

EPA P2 Home - Pollution Prevention Pays

Toxic Substances Control Act

Enacted on October 11, 1976, The Toxic Substances Control Act (TSCA) has been amended three times. Under the federally managed TSCA, EPA has authority to regulate the manufacture, use, distribution in commerce, and disposal of chemical substances. The intent of TSCA is to characterize and evaluate risks posed by a chemical to humans and the environment before the chemical is introduced into commerce. TSCA contains four titles:

- **Title I - Control of Toxic Substances:** This title includes provisions for testing of existing chemical substances and mixtures, regulation of hazardous chemical substances and mixtures, manufacture and processing notices, in addition to managing imminent hazards and reporting and recordkeeping requirements.
- **Title II - Asbestos Hazard Emergency Response:** The Asbestos Hazard Emergency Response Act (AHERA) amendment of 1986 established asbestos abatement programs in schools, requires periodic asbestos inspections and re-inspections and the necessary response actions in schools, and requires the EPA Administrator to made determinations of the extent of danger to human health posed by asbestos in public and commercial buildings and the means to respond to the dangers.
- **Title III - Indoor Air Radon Abatement:** In October 1988, Congress added the Radon Reduction Act amendment was to assist states in responding to the human health threats posed by exposure to radon. EPA was required to publish an updated citizen's guide on the health risks of radon and perform studies of the radon levels in government buildings and schools.
- **Title IV - Lead Based Paint Exposure:** In October 1992, the Lead-Based Paint Exposure Reduction Act amended TSCA to reduce environment exposure to lead contamination and prevent the adverse health effects caused by it. Provisions of the Act included exposure studies, determination of lead levels in products, establishing state programs for monitoring and abatement, and training and certification requirements for lead abatement workers.

TSCA is often regarded as a regulatory program affecting chemical manufacturers only. However, many provisions apply to a far broader group of industries. TSCA regulates the use of the following classes of chemicals:

- Polychlorinated biphenyls (PCBs)
- Asbestos
- Chlorofluorocarbons (CFCs).

In addition, TSCA provisions require manufacturers to provide EPA with data prior to manufacturing or importing a chemical. These "premanufacture notices" are designed to minimize the potential for a hazardous chemical to be improperly used either in manufacturing or by consumers. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides.

EPA Office of Pollution Prevention and Toxics
Toxic Substances Control Act Compliance Assistance

Clean Water Act

The Clean Water Act (CWA) of 1977 reorganized the 1972 Federal Water Pollution Control Act and added a major new program to control toxic water pollutants. The Water Quality Act of 1987 amended the CWA to address toxic hot spots and stormwater discharges while the Oil Pollution Act of 1990 tightened controls on discharges of oil and hazardous substances. The surface waters covered by the CWA are broadly defined and include rivers, lakes, intermittent streams, and wetlands (Groundwater is covered by the Safe Drinking Water

Act.) Pollutants regulated under the CWA include "conventional" pollutants, such as biochemical oxygen demand (BOD), total suspended solids (TSS), fecal coliform, oil and grease, and pH; "priority" pollutants, such as various toxic pollutants; and "non-conventional" pollutants which are pollutants not identified as either conventional or priority.

Five major provisions of CWA requirements address:

- **Direct discharges from point sources** are addressed by the National Pollutant Discharge Elimination System (NPDES) permitting program. NPDES permits are issued by the EPA or an authorized state and must be obtained for wastewater discharges from municipal, industrial, commercial, and certain agricultural sources prior to initiating discharges into surface waters. A permit specifies the quantity and quality of all discharges. It contains effluent limitations and monitoring and reporting requirements. The effluent limitation guidelines for each industrial category are based upon the degree of reduction of a pollutant that can be achieved through the application of various levels of technology (Best Practical Technology, Best Available Technology, and Best Conventional Technology). Permits are required to be renewed at least once every five years.
- **Indirect discharges** of wastewater to a municipal sewer system for treatment at a publicly owned treatment works (POTW) do not require NPDES permits but must meet pre-treatment requirements. These pretreatment requirements are intended to control concentrations of certain pollutants found in industrial wastewater that, if not controlled, may upset the POTW's treatment processes. Individual POTWs may establish pretreatment permit requirements as necessary to achieve their own effluent limitations.
- In 1987, the CWA was amended to establish a comprehensive framework for addressing **stormwater discharges** under the NPDES program. In November 1990, EPA published regulations outlining NPDES permit application requirements for stormwater discharges *associated with industrial activity* (40 CFR Part 122). Industries within certain industrial sectors that discharge stormwater associated with industrial activity must obtain an individual stormwater permit or obtain coverage under a promulgated stormwater general permit. In September 1995, EPA published the industry-specific Multi-Sector General Permit to provide NPDES permit coverage to eligible facilities within 29 different industrial sectors.
- The CWA embodies several provisions to **prevent and manage spills of oil and hazardous substances** that might affect waterways. Most significant of these is the requirement for Spill Prevention, Control and Countermeasure (SPCC) Plan at any facility that has oil or hazardous materials storage with the potential for releases into navigable waterways.

- The CWA exempts the placement of **dredge and fill materials** into surface waters from NPDES coverage. Rather, dredge and fill materials fall under a permit program administered by the Army Corps of Engineers (COE). Under the CWA, **wetlands** are included with surface waters; therefore activities to modify wetlands are generally covered by the COE permit.

EPA Office of Water
Clean Water Act Compliance Assistance

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources--rivers, lakes, reservoirs, springs, and ground water wells. SDWA applies to every public water system in the United States (SDWA does not regulate private wells which serve fewer than 25 individuals.)

Under SDWA, EPA is authorized to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. EPA works in conjunction with the states and water systems to ensure that these standards are met.

Through the 1986 SDWA Amendments, EPA established National Primary Drinking Water Regulations, including Maximum Contaminant Levels (MCLs) for contaminants in drinking water that may cause any adverse effects on the health of persons and that are known or anticipated to occur in public water systems. The 1996 SDWA Amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. These amendments emphasize risk-based standard setting, monitoring relief for public water supply systems, small water supply system flexibility, and community-empowered source water protection. Major new activities mandated by the 1996 Amendments include a multi-billion dollar Drinking Water State Revolving Fund, consumer awareness, small systems technical assistance and technology development, water system capacity assurance, and operator certification programs.

- EPA Office of Groundwater and Drinking Water
- Safe Drinking Water Act
- Safe Drinking Water Act Amendments of 1996
- Safe Drinking Water Act Compliance Assistance

Federal Insecticide, Fungicide, and Rodenticide Act

Enacted in 1947, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is the primary federal statute that governs pesticides, fungicides, and rodenticides in the U.S. Under FIFRA, all pesticides distributed or sold in the U.S. must be registered (licensed) by EPA. Before EPA may register a pesticide under FIFRA, the applicant must show, among other things, that using the pesticide according to specifications "will not generally cause unreasonable adverse effects on the environment."

FIFRA defines "unreasonable adverse effects on the environment" as any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide, or a human dietary risk from residues that result from a use of a pesticide in or on any food inconsistent with the standard under section 408 of the Federal Food, Drug, and Cosmetic Act."
EPA must classify each pesticide as either "general use," "restricted use," or both. "General use" pesticides may be applied by anyone, but "restricted use" pesticides may only be applied by certified applicators or persons working under the direct supervision of a certified applicator. Because of the limited data available for new chemicals, most pesticides are initially classified as restricted use. Applicators are certified by a state if the state operates a certification program approved by the EPA.

- EPA Office of Pesticide Programs
- Pesticide Laws, Regulations, and Policies
- Federal Insecticide, Fungicide and Rodenticide Act Compliance Assistance

Occupational Safety and Health Act

The Occupational Safety and Health Act of 1970 (OSH Act) was passed to ensure that employers provide workers with a workplace free from recognized hazards to safety and health and to:

- Encourage employers and employees to reduce workplace hazards and to implement new or improve existing safety and health programs
- Provide for research in occupational safety and health to develop innovative ways of dealing with occupational safety and health problems
- Establish "separate but dependent responsibilities and rights" for employers and employees for the achievement of better safety and health conditions
- Maintain a reporting and recordkeeping system to monitor job-related injuries and illnesses
- Establish training programs to increase the number and competence of occupational safety and health personnel
- Develop mandatory job safety and health standards and enforce them effectively
- Provide for the development, analysis, evaluation, and approval of state occupational safety and health programs.

The OSH Act extends to all employers and their employees in the 50 states, District of Columbia, Puerto Rico, and all other territories under Federal Government jurisdiction. Coverage is provided either directly by federal OSHA or through an OSHA-approved state.

An employer is defined as "any person engaged in a business affecting commerce who has eleven or more employees and applies to varied fields as manufacturing, construction, longshoring, agriculture, law and medicine, charity and disaster relief, organized labor, and private education." Employers exempt from the OSH Act include: self-employed persons, farms that employ only immediate family members, and working conditions regulated by other federal agencies under other federal statutes. However, exceptions to OSHA regulations exist for many small businesses with fewer than ten employees.