Solid Waste and Emergency Response (5305W)

# RCRA, Superfund & EPCRA Hotline Training Module

Introduction to:

**RCRA Statutory Overview** 

**Updated October 1999** 

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# **RCRA STATUTORY OVERVIEW**

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# 1. INTRODUCTION

This module presents a brief overview of the Resource Conservation and Recovery Act (RCRA). Through RCRA, Congress provided EPA with the framework to develop regulatory programs to manage solid waste, hazardous waste, medical waste and underground storage tanks. The statute includes 10 subtitles, briefly surveyed in this module. This module emphasizes the components of Subtitles C, D, and I, which provide the authority for EPA to establish many of the major regulatory components of the hazardous waste, solid waste, and underground storage tank programs respectively.

The statute represents Congress's intent for the design and implementation of the programs regulating hazardous and solid waste. Since EPA codified most of the statute into regulations, associating statutory language with a regulatory citation is fundamental to understanding the RCRA program.

After completing this module, you will have an understanding of the content and format of the law. Specifically, you will be able to:

- Explain the relationship between RCRA statutory language and codified regulatory language
- Describe the major components of each subtitle
- Identify the major provisions established by the Hazardous and Solid Waste Amendments (HSWA).

Use this list of objectives to check your knowledge of this topic after you complete the training session.

Before you begin this module, review the table of contents in the statute. Refer to the statute while you read the module.

# 2. STATUTORY SUMMARY

In 1965, Congress enacted the Solid Waste Disposal Act (SWDA), which provided the first federal statutory provisions designed to improve solid waste disposal practices. The SWDA was amended in 1970 by the Resource Recovery Act, and amended again in 1976 by the Resource Conservation and Recovery Act (RCRA). The changes embodied in RCRA restructured our nation's waste management practices by adding provisions for proper hazardous waste management. Congress continued to amend the statute after 1976. The most significant change occurred in 1984 with the passage of the Hazardous and Solid Waste Amendments (HSWA), which expanded the scope and requirements of the law. RCRA was subsequently amended by the Federal Facilities Compliance Act of 1992. This Act amends RCRA to state clearly that the federal government is part of the regulated community and that federal facilities are also subject to the wide range of enforcement actions, including fines and penalties.

The law referred to as RCRA is actually a combination of the first federal solid waste statute and all subsequent amendments. RCRA was most recently amended by the Land Disposal Program Flexibility Act of 1996. This amendment mandated changes to the RCRA land disposal restrictions regulatory program and the non-hazardous landfill groundwater monitoring program. Congress wrote RCRA to achieve three primary goals: (1) protection of human health and the environment; (2) reduction of waste and conservation of energy and natural resources; and (3) reduction or elimination of the generation of hazardous waste as expeditiously as possible. The Act is divided into 10 subtitles (A through J) that provide EPA with the framework and authority to achieve the goals of RCRA. Subtitles A, B, E, F, G, and H outline general provisions, authorities of the Administrator, duties of the Secretary of Commerce, federal responsibilities, miscellaneous provisions, and research, development, demonstration, and information. Subtitles C, D, I, and J establish the framework for four environmental programs: hazardous waste, respectively.

RCRA Subtitle C establishes a system for controlling hazardous waste from its point of generation to its final disposal. The program under RCRA Subtitle D encourages states to develop comprehensive plans to manage primarily nonhazardous solid waste, such as household and industrial solid waste, and mandates certain minimum technological standards for municipal solid waste landfills. Subtitle I provides the authority to regulate certain underground storage tanks. This Subtitle establishes performance standards for new tanks and requires leak detection, prevention, and corrective action at underground storage tank sites. The last program to be established was the medical waste program found in Subtitle J, which tracks medical waste from generation to disposal. The program, however, expired in June 1991.

# 2.1 GENERAL PROVISIONS — SUBTITLE A

This subtitle, found in §§1002 through 1008 of the statute, sets forth Congressional findings on solid waste management and provides guidelines for establishing a nationwide solid and hazardous waste management program. Congress concluded that the generation of municipal and industrial waste increases each year and that unsound disposal practices have increased the amount of pollution in the environment. Subtitle A defines key terms, explains state cooperative agreements, and discusses the integration of the statute with other acts. In addition, it outlines the primary goals of the RCRA program.

Congress directed EPA to fulfill the mandate of RCRA by meeting the following objectives, outlined in §1003:

- Provide technical and financial assistance to state and local entities
- Prohibit future open dumping of solid and hazardous wastes, and develop alternative land disposal options
- Minimize the generation of hazardous waste
- Require proper management of hazardous waste
- Establish a federal-state partnership to implement Subtitle C
- Provide authority for promulgating solid waste management guidelines
- Promote solid waste management research and development
- Establish a cooperative effort among federal, state, local, and private entities to recover energy and materials.

#### DEFINITIONS

The following terms are used throughout the statute and the codified regulations. The following definitions are statutory. In many cases, the regulatory definitions mirror the statutory definitions; however, in some cases these definitions may differ significantly. The complete list of statutory definitions is in §1004.

<u>Administrator</u> means the Administrator of the EPA. Throughout this module the term "Administrator" is used interchangeably with the term "EPA."

<u>Disposal</u> means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

<u>Hazardous waste</u> means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may either cause, or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

<u>Hazardous waste management</u> means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous wastes.

<u>Solid waste</u> means any garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities; but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under §402 of the Federal Water Pollution Control Act, as amended, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended.

<u>Storage</u>, when used in connection with hazardous waste, means the containment of hazardous waste, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such hazardous waste.

<u>Treatment</u>, when used in connection with hazardous waste, means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. This includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

# **GOVERNMENTAL COOPERATION**

Section 1005 states that the provisions of RCRA that are carried out by the states may also be administered by interstate agencies. Provisions applicable to states may also apply to interstate regions where such agencies and regions have been established by respective states and approved by the Administrator. In addition, this section permits two or more states to negotiate and enter into agreements or compacts, to assist each other with waste management practices and enforcement of the respective states' laws. These compacts are not binding unless all participating entities agree on the arrangement and it has been approved by the Administrator and Congress.

#### **INTEGRATION OF THE STATUTE WITH OTHER ACTS**

According to §1006, EPA is directed to administer and enforce all provisions of the Act while avoiding duplication, to the maximum extent practicable, with other acts (e.g., the Clean Air Act, the Clean Water Act). For example, §1006(c) specifically authorizes EPA to review the RCRA regulations applicable to the treatment, storage, or disposal of coal mining wastes and overburden that may duplicate regulations under the Surface Mining Control and Reclamation Act of 1977. This section also states that the RCRA requirements do not necessarily apply to activities or substances subject to the Clean Water Act, Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act, or the Atomic Energy Act.

# 2.2 OFFICE OF SOLID WASTE; AUTHORITIES OF THE ADMINISTRATOR AND INTERAGENCY COORDINATING COMMITTEE — SUBTITLE B

The administrative framework for EPA's management of the RCRA program is set forth in §§2001 through 2008, Subtitle B. One of the fundamental components, discussed in §2001, provides the authority for establishing EPA's Office of Solid Waste. This office executes the duties and responsibilities of the Administrator, outlined in §2002 and throughout the statute. Section 2001(b) authorizes the establishment of an Interagency Coordinating Committee to coordinate all activities concerning resource conservation and recovery from solid waste performed by all other federal agencies.

This subtitle also includes several miscellaneous provisions such as §2004, which authorized grants for discarded tire disposal. This type of grant is no longer available because the statute only authorized funds for fiscal years 1978 and 1979, and no additional funds were authorized. Another miscellaneous provision is found in §2005, which requires the labeling of certain oils with a statement encouraging the conservation of resources and the recycling of used oils.

# ANNUAL REPORT AND PROGRAM AUTHORIZATION

Under §2006, the Administrator must submit a detailed annual report to Congress on all activities of the Office of Solid Waste during the preceding fiscal year. The content of the report is detailed in §2006. Congress authorized funds in §2007 to implement the provisions of the Act for fiscal years 1977 through 1988. Since 1988, funding for the RCRA program has been provided through an annual Congressional appropriations process. In this way, Congress has been able to provide funding to EPA without revising the statute. Congress will address reauthorization of the RCRA program at some point in the future.

## **OFFICE OF OMBUDSMAN**

Under §2008, the statute authorizes the Administrator to establish an Office of Ombudsman. The purpose of this office is to receive individual complaints, grievances, and requests for information submitted by any person with respect to any program or requirement under RCRA. EPA has established a central Office of Ombudsman, as well as 10 Regional offices to fulfill this requirement.

# 2.3 HAZARDOUS WASTE MANAGEMENT — SUBTITLE C

The provisions of Subtitle C, in §§3001 through 3023, establish the criteria for managing hazardous waste from point of generation to ultimate disposal. Although the regulations set out in 40 CFR Parts 260 to 279 are the primary reference for information on the hazardous waste program, the statute provides important background information and provides the legal authority to EPA for promulgation of the regulations. This section addresses each heading within Subtitle C.

# HAZARDOUS WASTE IDENTIFICATION AND LISTING

Section 3001 authorizes the Administrator to promulgate regulations to identify the characteristics of hazardous waste (e.g., ignitability, corrosivity, reactivity, and toxicity) and lists of particular hazardous wastes. This section also provides EPA with the authority to grant delisting petitions for listed wastestreams generated by individual facilities.

HSWA added §3001(g) to the statute, requiring EPA to evaluate the effectiveness of the EP Toxicity test used to determine whether a waste exhibits the hazardous waste characteristic of toxicity. Ultimately, this provision resulted in the promulgation of a new test method for evaluating the toxicity characteristic and the addition of 25 organic constituents to the list of toxic constituents of concern: the Toxicity Characteristic Leaching Procedure (TCLP).

# **GENERATORS OF HAZARDOUS WASTE**

Sections 3002 and 3001(d) create distinctions between generators of hazardous waste based on quantities of waste generated. RCRA §3002(a) authorizes the Administrator to regulate generators of hazardous waste by establishing waste management standards. Section 3002(b) requires generators of hazardous waste to implement a waste minimization program. HSWA added a class of generators and redefined conditionally exempt small quantity generator requirements in §3001(d). Congress further defined generators by requiring a quantity determination for acutely hazardous waste (§3001(d)(7)(B)).

# TRANSPORTERS OF HAZARDOUS WASTE

Section 3003 authorizes EPA to regulate transporters of hazardous waste by establishing standards for recordkeeping, labeling, compliance with the manifest system, and transporting hazardous waste to a designated treatment, storage, or disposal facility. This section also requires that EPA's transporter requirements coordinate with DOT's.

# TREATMENT, STORAGE, AND DISPOSAL FACILITIES

Under §3004, the statute authorizes EPA to promulgate regulations establishing standards applicable to owners/operators of hazardous waste treatment, storage, and disposal facilities (TSDFs). These standards apply to the treatment, storage, or disposal of any hazardous waste listed or identified in Subtitle C. The statute authorizes regulation of the treatment, storage, and disposal of hazardous waste by establishing standards for the following provisions: recordkeeping and reporting requirements; compliance with the manifest system; location, design, and construction standards; emergency and contingency plans; financial responsibility standards; and facility permit standards.

#### Salt Formations and Underground Mines and Caves

Section 3004(b) specifically prohibits the disposal of hazardous waste in any salt dome formation, salt bed formation, or underground mines and caves, unless the Administrator determines that such action is protective of human health and the environment and issues a permit before disposal begins.

#### Liquid Waste

The statute prohibits the disposal of bulk or noncontainerized liquid hazardous waste in landfills in §3004(c). This prohibition remains in effect until the Administrator

promulgates regulations to mitigate risks associated with these disposal practices.

#### Land Disposal Restrictions

HSWA added the land disposal restrictions (LDR) to the RCRA program in §3004(d). The primary purpose of LDR is to reduce the toxicity and mobility of hazardous constituents in a hazardous waste prior to disposing of it directly on the land or in the ground.

HSWA divided the universe of listed and characteristic wastes into five groups for the purpose of LDR, and set schedules for EPA to develop treatment standards for these groups. EPA scheduled the development of standards based on the intrinsic hazard and volume of waste within each group, so that the first wastes to have treatment standards set were those wastes that were high in volume and had a high intrinsic hazard. Following is a description of the major LDR provisions.

#### Solvents and Dioxins

Solvent- and dioxin-containing wastes were the first category of wastes prohibited from land disposal. The statutory deadline was November 8, 1986 (§3004(e)).

#### California Wastes

The California list includes liquid hazardous wastes containing certain metals, free cyanides, PCBs, corrosives with a pH less than or equal to 2.0, and certain liquid and nonliquid hazardous wastes containing halogenated organic compounds (HOCs) (wastes which California originally restricted from land disposal). The statutory deadline was July 8, 1987 (§3004(d)).

#### "First, Second, and Third Third" Wastes

Under §3004(g), HSWA mandated that the remaining wastes be addressed in thirds. The statutory deadlines were as follows: First Third - August 8, 1988; Second Third - June 8, 1989; Third Third - May 8, 1990.

#### Newly Identified Wastes

Section 3004(g)(4)(c) addresses newly listed wastes, or those wastes that are listed or identified after November 8, 1984, the date of HSWA enactment. The statute requires that the Administrator make a determination about whether the waste may be land disposed within six months of the date that the waste was identified or listed as hazardous. Unlike the wastes that were specifically assigned prohibition dates, HSWA does not impose an automatic prohibition on land disposal if EPA misses the six-month deadline for a newly identified or listed waste. EPA plans to establish the additional treatment standards for newly identified wastes in upcoming rulemakings.

#### Variances from Land Disposal Prohibitions

According to §3004(h), EPA may determine that a waste-specific or site-specific variance from final land disposal prohibition is necessary based on extenuating circumstances. Such variances include national capacity variances, case-by-case extensions, and no-migration petitions.

#### **Deep Injection Well Disposal**

Section 3004(f) specifically authorizes EPA to determine if the disposal of solvents, dioxins, and California list wastes should be prohibited from injection well disposal unless the wastes meet treatment standards. Section 3004(g), which defines well injection as a type of land disposal, provides the authority for EPA to prohibit the disposal of First, Second, and Third Third wastes from deep well injection unless the wastes meet treatment standards. EPA codified regulations pursuant to this provision in 40 CFR Part 148, Hazardous Waste Injection Restrictions.

#### Storage of Prohibited Waste

Hazardous waste that is prohibited from land disposal is also prohibited from storage unless such storage is solely for the purpose of accumulating sufficient quantities of the waste to facilitate proper recovery, treatment, or disposal (§3004(j)). In 1992, Congress amended the statutory language in §3004(j) with the Federal Facility Compliance Act. Congress recognized that the Department of Energy (DOE) handles mixed waste for which there is currently no available treatment. In order to provide DOE with sufficient time to submit and obtain approval of plans for the development of treatment capacity and technologies for mixed wastes, Congress amended the prohibition on storage to allow DOE to retain sovereign immunity regarding mixed waste for three years. DOE is liable, however, at all times for any other RCRA violations.

#### Land Disposal Program Flexibility Act of 1996

Congress again amended RCRA in 1996 with the Land Disposal Program Flexibility Act of 1996. This statute amends §3004(g) by exempting decharacterized wastewater handled in Clean Water Act surface impoundments and Safe Drinking Water Act injection wells from RCRA LDR. The Act also requires EPA to conduct a study of any residual risks, not addressed by other federal or state laws, posed by decharacterized wastewater managed in surface impoundments.

#### **Ban on Dust Suppression**

Section 3004(l) prohibits the use of waste, used oil, or any other material that is contaminated with a hazardous waste as a dust suppressant or road treatment.

#### **Air Emissions**

HSWA added §3004(n) to the statute. This provision requires the Administrator to promulgate regulations to monitor and control organic air emissions at hazardous waste TSDFs, including but not limited to open tanks, surface impoundments, and landfills.

#### **Minimum Technological Requirements**

Section 3004(o), added by HSWA, establishes minimum technology requirements for landfills and surface impoundments. The statute requires these units to be equipped with (1) two or more liners, (2) a leachate collection system, (3) a leak detection system, and (4) groundwater monitoring. This section also requires new landfills, surface impoundments, waste piles, underground tanks, and land treatment units to use approved leak detection systems. In addition, §3004(o) provides the authority for the establishment of location standards for new and existing treatment, storage, and disposal facilities. Section 3004(o) also requires incinerators to meet destruction and removal efficiency.

#### **Groundwater Monitoring**

The standards for groundwater monitoring in §3004(p) are applicable to surface impoundments, waste piles, land treatment units, and landfills. The Administrator is authorized, however, to exempt such units from groundwater monitoring requirements on a case-by-case basis if the Administrator concludes that there is a reasonable certainty that hazardous constituents will not migrate beyond the outer layer of containment prior to the end of the post-closure care period.

#### **Hazardous Waste Fuels**

Section 3004(q) of the statute requires EPA to promulgate standards applicable to owners/operators of facilities producing a fuel from hazardous waste or burning any hazardous waste listed in §3001 in a boiler or industrial furnace (BIF). This provision requires these types of recycling activities to be regulated similarly to TSDFs, and is a particularly noteworthy provision because historically all recycling processes have been exempt from regulation. The statute authorizes the Administrator to regulate the use of hazardous waste as fuel by establishing standards for the following provisions: labeling requirements, recordkeeping and reporting, and financial responsibility standards.

#### **Financial Responsibility**

Section 3004(t) details the mechanisms that are allowable to demonstrate financial

responsibility as required by §3004(a). Guarantor liability and owner/operator bankruptcy or reorganization are also described in §3004(t).

## **Corrective Action at TSDFs**

Added by HSWA, §3004(u) authorizes the Administrator or a state to require corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a TSDF seeking a permit under Subtitle C, regardless of the time at which the waste was placed in the unit. If such corrective action cannot be completed prior to issuance of the permit, the permit must contain a schedule for completion of the corrective action and provisions for financial assurance.

TSDFs must also take corrective action measures beyond facility boundaries to protect human health and the environment (\$3004(v)). The owner/operator may be released from this responsibility only by demonstrating to the Administrator that despite best efforts, he or she is unable to get permission to carry out such action.

# PERMITS

Section 3005 discusses several types of permits. Each category defines operating requirements and various provisions for certain hazardous waste activities.

#### Treatment, Storage, and Disposal Facility Permits

Pursuant to §3005(a), EPA promulgated regulations requiring each person owning or operating an existing hazardous waste TSDF or planning to construct a new hazardous waste TSDF to have an operating permit. Section 3005(c)(3) states that any permit issued to a treatment, storage, or land disposal facility under this section shall be for a fixed term not to exceed 10 years. Permits for land disposal facilities are reviewed every five years and modified as necessary to ensure compliance and safety.

# Omnibus Authority

Section 3005(c)(3) authorizes EPA to review or modify a permit at any time during its term as necessary to protect human health and the environment. This statutory provision allows EPA to incorporate any additional standards into a RCRA permit that are necessary to protect human health and the environment. For example, EPA uses the omnibus authority to require site-specific risk assessments at facilities seeking permits to operate RCRA combustion units.

#### Waste Minimization

Section 3005(h) mandates, as a permit condition, that TSDFs that are also generators must have a program in place to reduce the volume and toxicity of the waste they generate. TSDFs must also manage that waste in a way which will minimize any

threat to human health and the environment.

#### Interim Status Surface Impoundments

Under §3005(j), the statute identifies extensive provisions for proper management of interim status surface impoundments. Without proper management standards, surface impoundments pose a substantial threat to human health and the environment (e.g., migration of leachate from unlined surface impoundments). All surface impoundments that were in existence on the date of enactment of HSWA are required to apply for interim status or close. All surface impoundments that receive interim status are required to comply with the minimum technology requirements of §3004(o)(1)(A) within four years of receiving interim status.

# **Surface Mining Control and Reclamation Permits**

According to §3005(f), a permit for the treatment, storage, or disposal of coal mining wastes or overburden issued under the Surface Mining Control and Reclamation Act of 1977 is regarded as a permit issued under Subtitle C. Regulations promulgated under Subtitle C do not apply to the treatment, storage, and disposal of coal mining wastes or overburden which are covered by this type of permit.

### **Research, Development, and Demonstration Permits**

EPA encourages the use of alternative treatment technologies by issuing research, development, and demonstration (RD&D) permits to any hazardous waste treatment facility that proposes to use innovative and experimental treatment technologies. Section 3005(g) provides this permitting incentive for experimental activities that are not currently subject to any specific RCRA standards. The RD&D permit requires that national standards must not exist for the proposed treatment technology. Although the statute authorizes EPA to waive general permit criteria, no waivers or modifications of financial assurance responsibilities or procedures regarding public participation are possible. This type of permit may only be renewed three times and the renewal period cannot exceed one year.

#### AUTHORIZED STATE HAZARDOUS WASTE PROGRAMS

Section 3006 requires the Administrator to promulgate guidelines to assist states in the development of hazardous waste programs. Once a state has been authorized by EPA to administer and enforce a hazardous waste program pursuant to Subtitle C, the state is authorized to implement its program in lieu of the federal program. Although a state may have an authorized program, the Administrator retains the authority to revoke the state's authorization. State authorization may only be withdrawn after a public hearing, if the Administrator determines that the state is not implementing the program in

accordance with federal regulations.

Because the state authorization process takes place piecemeal, a state may be authorized for some provisions and not others. This interface creates a conflict in terms of enforcement. Sometimes it is difficult to determine the effective date of a given regulation, particularly when examining the interface between provisions promulgated pursuant to RCRA versus those promulgated pursuant to HSWA.

# INSPECTIONS

Under §3007, the statute empowers the Administrator and authorized states to gain access to information relating to the generation, transportation, treatment, storage, and disposal of hazardous waste. Officers, employees, and representatives of EPA are authorized to enter any establishment that is managing hazardous waste, inspect the facilities, and obtain samples of any such waste. Any records, reports, or other information obtained by EPA are available to the public unless such information is deemed confidential.

The statute authorizes EPA and authorized states to commence biennial inspections of all TSDFs and authorizes the Administrator to inspect state or local TSDFs. Also, the statute authorizes the Administrator and authorized states to inspect federal facilities annually for proper treatment, storage, and disposal of hazardous waste.

# ENFORCEMENT

Section 3008 authorizes the Administrator, for any violation of RCRA, to issue an order requiring compliance, issue an order for civil penalties up to \$27,500 per day per violation, or issue an order for both compliance and penalties. Alternatively, the Administrator may commence a civil action in the U.S. District Court for appropriate relief. EPA must give notice of such enforcement action to authorized states. If a violator fails to comply with an order, the Administrator may assess a civil penalty up to \$27,500 for each day of noncompliance and revoke any permits issued to the violator. Section 3008(d) provides a list of actions that warrant criminal penalties, such as fines or imprisonment. Under §3008(e), the statute requires criminal penalties for any person who knowingly endangers another person in the course of hazardous waste management activities.

Under 3008(h), the statute authorizes EPA to issue a corrective action order to an interim status facility or assess a civil penalty to any interim status facility that has released hazardous waste into the environment. This section of the statute provides the enforcement authority that EPA may use in response to interim status facility and federal facility hazardous waste releases. An order issued under this section also may suspend or revoke an interim status permit, causing the facility to cease operations.

#### **Imminent Hazard**

The imminent hazard provision is an important enforcement tool and is therefore included in this part of the module as well as Miscellaneous Provisions — Subtitle G. Under §7003, the statute authorizes the Administrator to bring suit, or issue an order, against any person who has contributed to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste that may present an imminent and substantial endangerment to human health or the environment.

#### **PRELIMINARY NOTIFICATION**

Under §3010, the statute requires any person generating, transporting, treating, storing, or disposing of hazardous waste to notify the Administrator. The notification must be filed no later than 90 days after a facility becomes subject to regulation under Subtitle C. It must state the location, general description of site activities, and hazardous waste that is being handled. This notification provision is used by the Agency to issue EPA identification numbers. Currently, EPA Form 8700-12 is used to notify EPA of regulated waste activity.

#### MONITORING, ANALYSIS, AND TESTING

According to §3013, the statute authorizes EPA to issue an order requiring the owner/operator of any facility that presents a substantial hazard to human health or the environment to conduct monitoring, analysis, and reporting to determine the nature and extent of the hazard. If the Administrator determines that the current owner/operator could not have known of the presence of the hazard, the Administrator may issue an order requiring the most recent previous owner/ operator to carry out the investigation.

#### **RESTRICTIONS ON RECYCLED OIL**

Section 3014 of the statute, enacted as the Used Oil Recycling Act (UORA), requires EPA to promulgate regulations establishing performance standards and other requirements for the safe management of recycled oil. The Administrator must ensure that such regulations do not discourage the recovery or recycling of used oil. These standards are designed to encourage recycling and to protect human health and the environment. EPA also determined not to list used oil as hazardous waste since the standards that were promulgated were sufficient to ensure used oil would be handled safely.

# **INVENTORY OF FEDERAL HAZARDOUS WASTE FACILITIES**

According to §3016, each federal agency is required every two years to submit to the Administrator a list of sites owned or operated by the agency at which hazardous waste is treated, stored, disposed of, or has been disposed of at any time. If any federal agency fails to submit an inventory to the Administrator, the statute authorizes the Administrator to complete the inventory.

# **EXPORT OF HAZARDOUS WASTE**

Standards affecting the export of hazardous waste were added by HSWA in §3017. This provision requires any person exporting hazardous waste to (1) notify the Administrator, (2) obtain written consent from the receiving country, and (3) file an activity report to the Administrator no later than March 1 of each year (the Administrator conveys the written consent to the exporter). If there are applicable international agreements, exporters must comply with the terms of those agreements.

## **DOMESTIC SEWAGE**

Under §3018, the statute requires the Administrator to submit a report to Congress concerning substances identified or listed under §3001 that are not regulated under Subtitle C because of the domestic sewage exclusion. This report, completed in February 1986, is titled, <u>Report to Congress on the Discharge of Hazardous Wastes to Publicly Owned Treatment Works</u>.

# **EXPOSURE INFORMATION AND HEALTH ASSESSMENTS**

Under §3019, the statute requires owners/operators applying for a permit for a landfill or a surface impoundment under §3005(c) to submit information on the potential for public exposure to hazardous wastes or hazardous constituents from a release related to such a unit. If the Administrator or authorized state decides that a landfill or surface impoundment poses a potential risk to human health, the Administrator or state may require the Agency for Toxic Substances and Disease Registry (ATSDR) to conduct a health assessment at the facility. If the assessment results indicate public exposure to a release of a hazardous substance under CERCLA, EPA may seek cost recovery from the owner/operator under CERCLA §107.

# SAFE DRINKING WATER ACT PROVISION

Although HSWA's primary purpose was to amend the RCRA program, Congress also added a provision (§3020) under the authority of the Safe Drinking Water Act (SDWA). This provision requires that no hazardous wastes may be disposed of by underground injection into any underground drinking water source or any formation located above such a source. Such provisions are enforceable pursuant to the SDWA. This provision does not apply to the injection of contaminated groundwater into the aquifer from which it was withdrawn if the injection is a response action under CERCLA or part of a corrective action under Subtitle C and if such contaminated groundwater is treated to substantially reduce hazardous constituents.

# MIXED WASTE PROVISIONS

When Congress amended RCRA in 1992 with the Federal Facility Compliance Act, it included §3021 covering mixed waste inventory reports and plans. This section requires the Secretary of Energy to submit a detailed report and inventory of all mixed waste activity. This report is submitted to the EPA Administrator and all affected state governors. The primary purpose of this provision is to ensure that the DOE discloses the amount of mixed waste at each of its facilities and its intentions for proper disposal.

## **PUBLIC VESSEL**

Section 3022, added by the Federal Facility Compliance Act, mandates that any hazardous waste generated on a public vessel is not subject to the storage, manifest, inspection, or recordkeeping requirements until the waste is transferred onshore. For purposes of this section Congress defines public vessel as a vessel owned/operated by the United States, or by a foreign nation, except when the vessel is engaged in commerce. This provision is applicable unless the waste is stored for more than 90 days or if the waste is transferred to another public vessel and stored there for more than 90 days.

Section 3023, also added to RCRA by the Federal Facility Compliance Act, extends the domestic sewage exclusion in §1004(27) to include wastes that are discharged to federally owned treatment works. These wastes would need to meet the criteria established under §3023 to be excluded.

# 2.4 STATE OR REGIONAL SOLID WASTE PLANS — SUBTITLE D

Subtitle D, set forth in §4001 through §4010, provides guidelines for establishing a solid waste management program. The term "solid waste" used in Subtitle D refers almost exclusively to nonhazardous solid waste. It does, however, include certain hazardous wastes that are excluded from regulation under Subtitle C, such as household hazardous waste and hazardous waste generated by conditionally exempt small quantity generators. The primary objectives of the Subtitle D program are to assist in developing and encouraging methods for the disposal of solid waste which are environmentally sound and which maximize the use of valuable resources, including energy and materials. Subtitle D also encourages the recovery of reusable materials

from solid waste. The statute authorizes state and regional authorities to use federal technical and financial assistance to establish solid waste management programs pursuant to federal guidelines.

#### **GUIDELINES AND ASSISTANCE FOR STATE AND LOCAL PLANS**

Under §4002, the statute authorizes EPA to promulgate regulations to assist in the development and implementation of state solid waste management plans. In establishing such regulations EPA must consider the following provisions: protection of groundwater and surface water from leachate contamination; collection, storage, processing, and disposal practices; methods for closing and upgrading open dumps; and population density, distribution, and projected growth.

In order for a state solid waste management plan to be approved by the Administrator, a state program must meet the minimum requirements of §4003. Some of these requirements include closing or upgrading existing open dumps, recovering resources from all solid waste or disposing of such waste in a sanitary landfill, and coordinating regional planning and implementation. The statute authorizes states to use federal funds to meet the minimum requirements; however, no funding is available at this time.

Section 4004 specifically authorizes the Administrator to promulgate regulations containing criteria for determining the classification of solid waste management facilities as sanitary landfills or as open dumps. The statute further mandates that state plans prohibit the establishment of any new open dumps. Section 4005 actually prohibits the open dumping of solid or hazardous waste and sets minimum federal standards for municipal solid waste landfills.

Section 4007 outlines the criteria for approval of a state plan for federal financial assistance. The funds appropriated for this assistance are listed in §4008 but only cover fiscal years 1978 through 1988. According to §4009, the statute authorizes the Administrator to provide grants to states for distribution to municipalities with a population of less than 5,000 or less than 20 persons per square mile and not within a metropolitan area. Such grants are available to municipalities that cannot feasibly be connected to a solid waste management system, are unable to close or upgrade open dumps, or have plans consistent with state program objectives.

Section 4010 of HSWA authorized EPA to revise the existing sanitary landfill criteria to establish specific regulations for facilities that may receive household hazardous waste or hazardous waste from conditionally exempt small quantity generators (i.e., municipal solid waste landfills (MSWLFs)). The statute mandated that these standards, at a minimum, require groundwater monitoring at MSWLFs, establish criteria for acceptable location of new or existing facilities, and provide for corrective action as

appropriate (§4010(c)).

Congress slightly amended these provisions with the Land Disposal Program Flexibility Act of 1996. This Act exempts certain small, remote, or arid MSWLFs from groundwater monitoring standards, and also directs EPA to study (and if necessary, promulgate revisions to) the cover, methane monitoring, and financial assurance requirements for such landfills.

# **RECYCLING PROVISIONS**

Under §§4003(b) and 4008(g), the statute authorizes provisions to encourage recycling of used oil. The Administrator may make grants to states for the implementation of such recycling programs. Such funds may not be used for construction or acquisition of land or equipment. No funding is available at this time.

# 2.5 DUTIES OF THE SECRETARY OF COMMERCE IN RESOURCE AND RECOVERY — SUBTITLE E

In addition to EPA's mandate under RCRA, the statute (§§5001 through 5006) authorizes the Secretary of Commerce to carry out the following duties:

- Encourage greater commercialization of proven resource recovery technology
- Publish guidelines for the development of specifications for the classification of materials recovered from waste which are destined for disposal
- Identify and develop potential markets for recovered materials
- Evaluate the commercial feasibility of resource recovery facilities.

# 2.6 FEDERAL RESPONSIBILITIES/FEDERAL PROCUREMENT — SUBTITLE F

Under §6001, the statute requires each department, agency, and instrumentality of the executive, legislative, and judicial branches of the federal government to comply with all federal, state, interstate, and local requirements, both substantive and procedural, that apply to solid and hazardous waste management. The President may exempt any solid waste management facility of any department, agency, or instrumentality in the executive branch from compliance with such a requirement if he or she determines that it is paramount to the interest of the United States. The period for any exemption may

not exceed one year, but additional exemptions may be granted.

According to §6002, the statute requires the Administrator to prepare and occasionally revise guidelines which encourage procuring agencies to manage and arrange for the procurement of solid waste services in a manner which maximizes energy and resource recovery. This section applies to all procuring agencies that purchase items exceeding \$10,000. The statute requires such agencies to purchase items that are composed of the highest percentage of recovered materials, consistent with maintaining a satisfactory level of competition. Each procuring agency must develop an affirmative procurement program, which will ensure that items composed of recovered materials are purchased to the maximum extent practicable.

Procurement guidelines have been established for the following items: paper and paper products, vehicular products, construction products, transportation products, park and recreation products, landscaping products, and non-paper office products.

# 2.7 MISCELLANEOUS PROVISIONS — SUBTITLE G

Subtitle G, set forth in §§7001 through 7010, addresses several important but not necessarily related provisions. These provisions include employee protection, citizen suits, imminent hazard, public participation, and grants.

# **EMPLOYEE PROTECTION**

Under §7001, the statute provides employees with protection from being fired or discriminated against for either filing a proceeding or testifying about issues related to RCRA enforcement. If an employee is fired and believes discrimination was the basis for such action, he or she may apply for a review by the Administrator.

# **CITIZEN SUITS**

In §7002 the statute authorizes any citizen to commence a civil action on his or her own behalf against any person, including any governmental entity, who is alleged to be in violation of any permit, standard, regulation, condition, requirement, prohibition, or order which is effective pursuant to RCRA. Citizen suits also may be filed against any past or present generator, transporter, or owner/operator of a TSDF who presents an imminent or substantial endangerment to human health or the environment or against the EPA for failure to take a nondiscretionary action. No citizen suits may commence if the Administrator is already taking action under RCRA or CERCLA §104 or §106. Citizen suits are codified in 40 CFR Part 254.

#### **IMMINENT HAZARD**

Section 7003 provides an important enforcement authority under the RCRA program. This section states,

Notwithstanding any other provision of this Act, upon receipt of evidence that the *past* or *present* handling, storage, treatment, transportation, or disposal of any solid or hazardous waste may present an imminent and substantial endangerment to health or the environment, the Administrator may bring suit on behalf of the United States in the appropriate district court against any person who has contributed or is contributing... [or issue] such orders as may be necessary to protect public health and the environment.

This broad citation is very useful in explaining to callers that generators, transporters, and owner/operators of TSDFs are responsible for proper solid and hazardous waste management.

#### **PUBLIC PARTICIPATION**

According to §7004, any person may petition the Administrator for the promulgation, amendment, or repeal of any regulation under RCRA. The statute requires the Administrator (with input from states) to develop and publish guidelines for public participation in the development, implementation, and enforcement of any regulation, guideline, or program under the Act. EPA codified regulations concerning public participation at 40 CFR Part 124.

#### **SEPARABILITY**

Although a provision of RCRA may be deemed inapplicable to a particular person or situation, such provision remains applicable to all other persons and situations. This provision is known as the "separability provision" in §7005.

#### **TRAINING GRANTS**

Under §7007, the statute authorizes the Administrator to provide grants to states, municipalities, educational institutions, or any other organization capable of effectively implementing a training program for proper solid waste management and resource recovery operations. No grants will be issued under this provision to any private, profit-making organization.

# 2.8 RESEARCH, DEVELOPMENT, DEMONSTRATION, AND INFORMATION — SUBTITLE H

The Administrator is authorized by §§8001 through 8007 to promote the following through both technical and financial assistance: research, investigation, experiments, training, demonstrations, surveys, public education programs, and studies relating to health effects of solid waste releases into the environment, operation and financing of solid waste management programs, resource conservation and recovery operations, and innovative technical advances. The Administrator shall establish a management program to coordinate activities and facilitate results.

# SPECIAL STUDIES

Under §8002, the statute requires the Administrator to complete studies and publish results on several specific solid waste issues including glass and plastic recovery, solid wastestream composition, small-scale and low technology solid waste management, and household resource recovery. Other important studies include the following:

- The negative environmental effects of solid wastes from active and abandoned surface and underground mines
- The classification and analysis of sludge
- The analysis of problems involving collection, recovery, and disposal of discarded motor vehicle tires
- The hazards associated with municipal landfills located near airports (i.e., birds congregating and feeding on landfill refuse)
- The feasibility and desirability of additional performance standards or other regulations for generators of hazardous waste
- The adverse effects of drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy
- The adverse effects of materials generated from the combustion of coal and other fossil fuels
- The effects of cement kiln dust on human health and the environment
- The concerns associated with materials generated from the extraction,

beneficiation, and processing of ores and minerals, including phosphate rock and overburden from uranium mining.

#### SOLID WASTE MANAGEMENT INFORMATION

Section 8003 charges the Administrator with collecting and evaluating information on solid waste management practices, maintaining data in a central library, developing cost models for states and local governments to use in evaluating solid waste management issues, and developing programs for the rapid dissemination of information pertaining to solid waste management issues.

#### GRANTS FOR RESOURCE RECOVERY SYSTEMS AND DEMONSTRATIONS

Section 8004 authorizes the Administrator to enter into contracts with either public agencies or private persons for the construction and operation of a full-scale facility or provide financial assistance to a full-scale demonstration facility that will significantly improve or advance a technology or process. The Administrator must try to share the cost of full-demonstration facilities with other federal, state, local, or private entities.

Under §8006, the statute authorizes the Administrator to make grants for the demonstration of resource recovery systems or for the construction of new or improved solid waste disposal facilities; however, no funding is available at this time. Such grants, when available, may not be used for land acquisition.

# 2.9 REGULATION OF UNDERGROUND STORAGE TANKS — SUBTITLE I

Subtitle I authorizes the Administrator to regulate underground tanks storing regulated substances, including petroleum products (e.g., gasoline and crude oil) as defined in §9001. Subtitle I, §§9001 through 9010, authorizes EPA to develop performance standards for underground storage tanks including design, construction, installation, release detection, and compatibility standards for new tanks, and requirements applicable to all tank owners/operators concerning leak detection, recordkeeping and reporting, corrective action, and closure. A major component of HSWA, Subtitle I breaks new ground in the RCRA program because it regulates products as well as wastes.

#### STATE PROGRAM APPROVAL

Similar to Subtitle C, states may receive authorization from the Administrator to implement an UST release detection, prevention, and corrective action program. If the

state receives authorization from the Administrator to implement an UST program, the state program will operate in lieu of the federal program. If the Administrator deems that a state is not administering and enforcing an authorized program in accordance with Subtitle I, the Administrator may withdraw such authorization.

#### FEDERAL ENFORCEMENT

Under §9006, the statute authorizes the Administrator to issue an order to any person in violation of any requirement of Subtitle I. The Administrator gives notice to the state in which such violation has occurred prior to issuing an order or commencing a civil action. The statute requires each department, agency, and instrumentality of the executive, legislative, and judicial branches of the federal government to comply with all applicable requirements, both substantive and procedural, that apply to proper UST management. The President may exempt any UST of any department, agency, or instrumentality in the executive branch from compliance with such a requirement if he or she determines it to be in the paramount interest of the United States. The period for any exemption may not exceed one year, but additional exemptions may be granted.

# 2.10 MEDICAL WASTE TRACKING ACT — SUBTITLE J

In November 1988, Subtitle J was added to the statute to help control the widespread mismanagement of medical waste. Subtitle J directed EPA to develop a two-year demonstration program to track medical waste from generation to disposal. This pilot program applied only to Connecticut, New Jersey, New York, Puerto Rico, and Rhode Island. EPA codified regulations in 40 CFR Part 259 that established requirements for medical waste generators, transporters, and treatment, destruction, and disposal facilities. The two-year demonstration program expired June 22, 1991, and to date has not been reauthorized. Because the federal medical waste provisions were no longer in effect, EPA formally removed Part 259 from the CFR (60 FR 33912; June 29, 1995).

# 3. STATUTORY DEVELOPMENTS

On March 16, 1995, the President and Vice President announced a plan for "Reinventing Environmental Regulation." The plan described steps to substantially improve existing environmental regulatory programs. The President's regulatory reinvention effort is aimed at refocusing the RCRA program on high-risk wastes; providing states with flexibility to design ways to manage low-risk, high-volume waste generated during environmental cleanup; and developing a new "common sense" definition of solid waste to simplify industry compliance with RCRA rules.

To achieve these goals, EPA was required to look beyond the regulatory process in many instances. The statutory authority and mandates set forth in RCRA have placed limitations on the scope and content of regulatory changes that EPA can propose. As a result, EPA worked to identify a package of targeted legislative improvements to RCRA. In developing this package, EPA created a series of issue papers about the following aspects of the RCRA program:

- Permits
- Management Requirements
- Listing Determinations
- Prescriptive Requirements
- Untreated Waste Disposal
- Indian Tribal Program Approval
- Land Disposal Restrictions
- Treatment Requirements
- Recycling of Hazardous Waste
- Corrective Action
- Hazardous Waste Manifest.

These issue papers were the focus of a series of meetings between EPA, stakeholders, and co-implementors. After the meetings were completed, EPA incorporated the comments and concerns of the different stakeholders and co-implementors into the final package of specific suggested changes to the statute. The package was submitted to Congress in mid-1995.

On March 26, 1996, President Clinton signed the Land Disposal Program Flexibility Act. This Act amended the LDR standards and groundwater monitoring standards for certain Subtitle D solid waste landfills, as described earlier in this module.

On May 13, 1996, President Clinton signed the Mercury-Containing and Rechargeable Battery Management Act. The goals of this Act are to reduce the mercury content in consumer batteries, by reducing the allowable mercury content in those batteries, and to encourage recycling of rechargeable batteries. The Act also renders the universal waste program for batteries effective in all states, regardless of authorization status. EPA is studying the Act to determine what RCRA regulatory changes are necessary as a result of the Act.

# 4. APPENDIX

#### SUBTITLE C — TABLE OF STATUTORY AND REGULATORY CITATIONS

| Statutory<br>Citation | <b>Regulatory</b> Citation | Description of Subtitle C Section                                   |
|-----------------------|----------------------------|---|
| §3001                 |                            | IDENTIFICATION AND LISTING OF HAZARDOUS<br>WASTE                    |
| §3001(a)              | Part 261, Subpart C        | Hazardous waste criteria - toxicity, persistence,                   |
|                       | Part 261, Subpart D        | degradability, accumulation, flammability, and                      |
|                       |                            | corrosiveness   |
| §3001(b)              | Part 261, Subpart C        | Requirement to promulgate listings and characteristics              |
|                       | Part 261, Subpart D        | of hazardous waste  |
|                       |                            | Four types of waste (Bevill/Bentsen) excluded pending study results |
|                       | §261.4(b)(5)               | Energy exploration, development, and production                     |
|                       | §261.4(b)(4)               | Coal or fossil fuel combustion                                      |
|                       | §261.4(b)(7)               | Extraction, beneficiation, processing of ores/minerals              |
|                       | §261.4(b)(8)               | Cement kiln dust  |
| §3001(c)              |                            | Governor's petition to list hazardous wastes                        |
| §3001(d)              | §261.5                     | Small quantity generator waste                                      |
| §3001(d)(3)           | §262.20                    | Manifest requirement and specification of contents of               |
|                       |                            | manifest  |
| §3001(d)(7)           | §261.5(e)                  | Quantity determination for acutely hazardous waste                  |
| §3001(e)              |                            | Requirement to examine specific wastes such as                      |
|                       |                            | carbamates, dyes and pigments, chlorinated aliphatics,              |
|                       |                            | solvents, and dioxins   |
| §3001(f)              | Part 260, Subpart C        | Delisting petitions   |
| §3001(g)              | Part 261, App. II          | Examination of the EP Toxicity procedure                            |
| §3001(i)              | §261.4(b)(1)               | Clarification of household hazardous waste exclusion                |
|                       |                            |   |
| §3002                 |                            | STANDARDS APPLICABLE TO GENERATORS                                  |
| §3002(a)(1)           | §262.40                    | Recordkeeping   |
| §3002(a)(2)           | Part 262, Subpart C        | Labeling  |
| §3002(a)(5)           | Part 262, Subpart B        | Manifest system   |
| §3002(a)(6)           | §262.41                    | Biennial report   |
| §3002(b)              | §262.41(a)(6)              | Waste minimization  |
|                       |                            |   |
| <b>§3003</b>          | Part 263                   | STANDARDS APPLICABLE TO TRANSPORTERS                                |
| §3003(a)(1)           | §263.22                    | Recordkeeping   |
| §3003(a)(2)           |                            | Labeling  |
| §3003(a)(3)           | Part 263, Subpart B        | Manifest  |
| §3003(b)              |                            | EPA/DOT coordination  |
| §3003(c)              |                            | Requirements for hazardous waste fuel transporters                  |

| Statutory<br>Citation | <b>Regulatory</b> Citation                      | Description of Subtitle C Section   |
|-----------------------|---|---|
| §3004                 |   | STANDARDS APPLICABLE TO TREATMENT,<br>STORAGE, AND DISPOSAL FACILITIES (TSDFs)  |
| §3004(a)              | Parts 264/265,<br>Subparts A-E, H               | General requirements for TSDFs: recordkeeping,<br>reporting, specific operating conditions, location and<br>design criteria, contingency plans, maintenance,<br>training, financial responsibility, permits, and<br>manifesting |
| §§3004(b), (c)        | \$\$264/265.18(c)<br>\$\$264/265.314(b)         | Liquids in landfills prohibition  |
| §3004(d)              |   | Prohibition of land disposal of specified wastes  |
| §3004(d)(2)           | §268.32   | California list   |
| §3004(e)              | §§268.30-31                                     | Solvents and dioxins  |
| §3004(g)(4)           | §268.13   | First, Second, and Third Third wastes   |
| §3004(g)(6)           |   | Hard hammer   |
| §3004(g)(7)-(9)       |   | Land Disposal Program Flexibility Act of 1996   |
| §3004(g)(10)          |   | Surface Impoundment Study   |
| §3004(h)              | §§268.45/268.35                                 | LDR variances   |
| §3004(j)              | §268.50   | Storage prohibition   |
| §3004(k)              | §268.2(c)                                       | Definition of land disposal   |
| §3004(l)              | Part 266, Subpart C<br>§266.23(b)<br>§279.12(b) | Ban on used oil as a dust suppressant   |
| §3004(m)              | Part 268  | Treatment standards for hazardous waste   |
| §3004(n)              | Parts 264/265,<br>Subparts AA and BB            | Air emission standards  |
| §3004(o)(1)           | Parts 264/265,<br>Subparts K-N                  | Minimum technological requirements (MTR)  |
| §3004(o)(2)           | Parts 264/265,<br>Subparts K-N                  | Alternative design for MTR  |
| §3004(o)(5)           | Parts 264/265,<br>Subparts K-N                  | Bottom liner requirement for MTR  |
| §3004(o)(7)           | §§264/265.18                                    | Location standards  |
| §3004(p)              | Parts 264/265, Subpart F                        | Groundwater monitoring  |
| §3004(q)              |   | Hazardous waste used as a fuel  |
| §3004(q)(2)(C)(i)     |   | Cement kiln location prohibition  |
| §3004(s)              | Parts 264/265, Subpart E                        | Recordkeeping   |
| §3004(t)              | Parts 264/265, Subpart H                        | Financial assurance   |
| §3004(u)              | §264.101  | Corrective action at permitted facilities   |
| §3004(v)              | §264.101(c)                                     | Corrective action beyond the facility boundary  |
| §3004(x)              |   | Tailored standards for Bevill wastes  |
| §3004(y)              | Part 266, Subpart M                             | Military Munitions  |
| § <b>3005</b>         |   | PERMITS FOR TREATMENT, STORAGE, AND<br>DISPOSAL FACILITIES  |
| §3005(a)              | §270.1(c)                                       | Permit requirement  |
| §3005(a)              | §261.8  | TSCA exemption  |
| §3005(b)              | Part 270, Subpart B                             | Permit information requirements   |

| Statutory<br>Citation | <b>Regulatory Citation</b> | Subtitle C - Statute Description                   |
|-----------------------|----------------------------|--|
| §3005(c)              | §270.50                    | Duration of permits                                |
| §3005(c)(3)           | §270.32(b)                 | Omnibus provision                                  |
| §3005(c)              | Part 270, Subpart D        | Permit modifications                               |
| §3005(d)              | §270.43                    | Revocation of permit for noncompliance             |
| §3005(e)(1)           | Part 270, Subpart G        | Interim status                                     |
| §3005(e)(2)           | §270.73                    | Loss of interim status                             |
| §3005(f)              | Part 270, Subpart F        | Coal mining wastes and reclamation permits         |
| §3005(g)              | §270.65                    | RD&D permits                                       |
| §3005(h)              | §§264/265.75(h) and (i)    | Waste minimization                                 |
| §3005(i)              | §270.1(c)                  | Post-closure permits                               |
| §3005(j)              | Part 265, Subpart K        | Interim status surface impoundments                |
| §3005(j)(6)(A)        | •                          | Retrofitting requirements                          |
|                       |                            |  |
| <b>§3006</b>          | <b>D</b>                   | AUTHORIZED STATE WASTE PROGRAMS                    |
| §3006(a)              | Part 271                   | State programs                                     |
| §3006(b)              | §§271.1 - 271.4            | Equivalent and consistent                          |
| §3006(c)              | Part 271, Subpart B        | Interim authorization                              |
| §3006(d)              |                            | Effect of state permit                             |
| §3006(e)              | §§271.22 - 271.23          | Withdrawal of authorization                        |
| §3006(f)              | §271.17                    | Public availability of information                 |
| §3006(g)              | §271.25                    | Effect of regulations promulgated pursuant to HSWA |
| §3006(h)              | §271.26                    | State programs for used oil                        |
| §3007                 |                            | INSPECTIONS  |
| §3007(a)              |                            | Access and entry                                   |
| §3007(b)              |                            | Availability of information to the public          |
| §3007(c)              |                            | Federal facility inspections                       |
| §3007(e)              |                            | Mandatory biennial inspections                     |
| §3008                 |                            | FEDERAL ENFORCEMENT                                |
| §3008(a)              |                            | Compliance orders                                  |
| §3008(b)              |                            | Public hearing                                     |
| §3008(c)              |                            | Civil penalties                                    |
| §3008(d)              |                            | Criminal penalties                                 |
| §3008(e)              |                            | Knowing endangerment                               |
| §3008(f)              |                            | Criteria for determining knowing endangerment      |
| §3008(h)              |                            | Corrective action for interim status facilities    |
| <b>§3009</b>          | §271.3(a)(2)               | MANDATES THAT STATE REGULATIONS BE AT              |
|                       |                            | LEAST AS STRINGENT AS FEDERAL                      |

| Statutory<br>Citation | <b>Regulatory</b> Citation        | Subtitle C - Statute Description  |
|-----------------------|-----------------------------------|---|
| §3010                 | §§262.12, 263.11,<br>& 264/265.12 | NOTIFICATION REQUIREMENT FOR<br>GENERATORS, TRANSPORTERS, AND<br>TREATMENT, STORAGE, AND DISPOSAL<br>FACILITIES               |
| <b>§3011</b>          |                                   | MONEY FOR THE STATES  |
|                       |                                   |   |
| §3012                 |                                   | STATE HAZARDOUS WASTE INVENTORY   |
| <b>§3013</b>          |                                   | MONITORING, ANALYSIS, AND TESTING   |
| <b>§3014</b>          |                                   | <b>RESTRICTIONS ON RECYCLED OIL</b>   |
| §3014(a)              | Part 279                          | Mandate to promulgate regulations for recycled used oil<br>that do not discourage recovery or recycling                       |
| §3014(b)              |                                   | Identification or listing of used oil   |
| §3014(c)              | Part 279                          | Used oil not subject to Subpart C when recycled   |
| <b>§3015</b>          | §265.1(a)                         | ADDING NEW UNITS AT INTERIM STATUS<br>FACILITIES  |
|                       |                                   | · ·   |
| <b>§3016</b>          |                                   | FEDERAL FACILITIES INVENTORY  |
| <b>§3017</b>          | Part 262, Subpart E               | EXPORTS OF HAZARDOUS WASTE  |
| §3017(a)              | §262.53                           | No export unless receiving country consents,<br>notification is given to Administrator, and shipment<br>conforms with consent |
| §§3017(c), (d)        | Part 262, Subpart E               | Procedures for export requirements  |
| §3017(f)              | §262.58 (reserved)                | International agreements operate in lieu of regulations   |
| §3017(g)              | §262.56                           | Export activities report  |
| §3018                 |                                   | DOMESTIC SEWAGE   |
| §3018(a)              |                                   | Report to Congress to characterize wastes excluded by<br>POTW discharge   |
| §3018(b)              | CWA/NPDES                         | Mandate to promulgate additional regulations to assure<br>that these wastes are adequately controlled                         |
| §3018(c)              |                                   | Wastewater lagoons  |

| Statutory<br>Citation | <b>Regulatory Citation</b> | Subtitle C - Statute Description   |
|-----------------------|----------------------------|--|
| §3019                 | §270.10(j)                 | EXPOSURE INFORMATION AND HEALTH<br>ASSESSMENTS                                       |
|                       |                            |  |
| \$3020                |                            | HAZARDOUS WASTE INJECTION RESTRICTIONS   |
| §3020<br>§3021        |                            | HAZARDOUS WASTE INJECTION RESTRICTIONS<br>MIXED WASTE INVENTORY REPORTS AND<br>PLANS |
| 0                     |                            | MIXED WASTE INVENTORY REPORTS AND  |