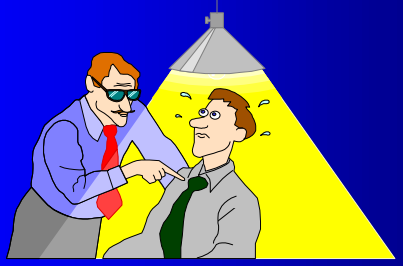
Subtitle C Program Overview

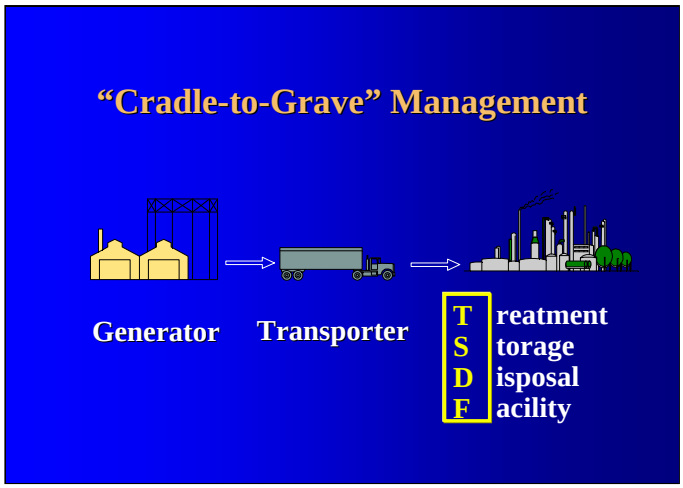
The purpose of the RCRA Subtitle C overview is to introduce the “outline” of the hazardous waste program. The “outline” establishes a foundation on which we can build our “working level” knowledge of some key requirements and provides the frame of reference for the more detailed discussions that will follow this module.

By the end of this module, participants will be able to:

- State the key elements of the “cradle-to-grave” management system. (pp. 3 - 9)
- Explain the relationship between the universe of materials and its hazardous/mixed waste subsets. (p. 5)
- Explain four recent modifications to the Subtitle C program that may affect DOE operations. (pp. 11 - 15)
- Cite some of the enforcement options and mechanisms that are available to regulators to address noncompliance. (pp. 17 - 20)
- Recognize the relationship between Subtitle C and other laws. (p. 21)

What are the components of a “cradle-to-grave” management system?

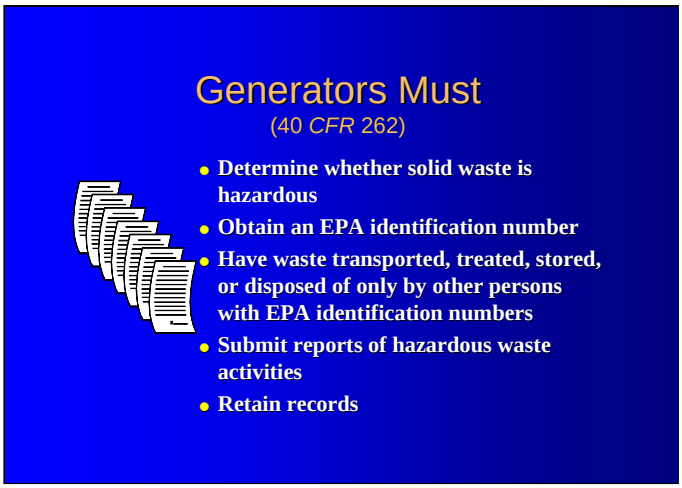




As noted earlier, the goals of RCRA are protection of human health and the environment, conservation of natural resources, and waste minimization. To achieve protection of human health and environment, RCRA imposes stringent administrative requirements to ensure accountability for waste management as well as substantive requirements to minimize the potential for release of hazardous waste. The administrative requirements may appear to be trivial; however, a closer look at them reveals their importance in assigning and tracking accountability for hazardous waste management. Consequently, administrative deficiencies are common foundations for enforcement actions. Substantial effort, therefore, must be given to ensuring that administrative, as well as substantive, requirements are met.

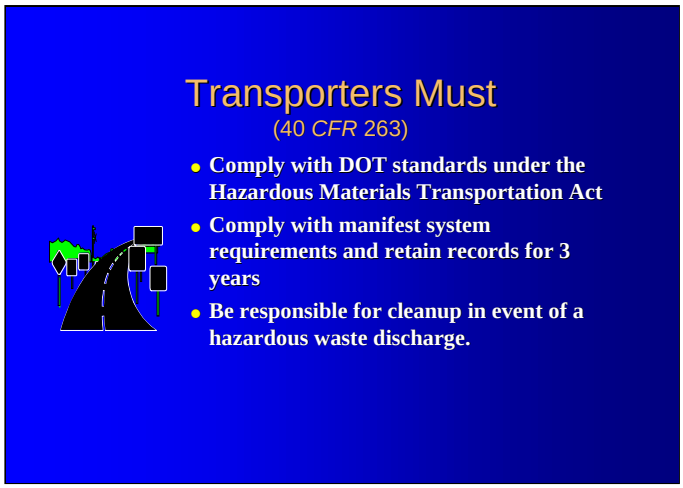
The first step in RCRA compliance is determining which materials are subject to RCRA Subtitle C standards. The next step is ensuring compliance with Subtitle C standards for these specific wastes. The remainder of this module briefly reviews these management standards, to whom they apply, and the potential consequences for noncompliance. Later modules expand on this overview.

RCRA's hazardous waste management requirements only apply to materials that have served their original intended purpose and are being discarded. These standards **may** also apply when the discarded material is reused elsewhere. Because management requirements only apply to certain discarded materials, understanding which discarded materials are regulated is essential to ensuring compliance with RCRA. Therefore, portions of Course Days 1 and 2 will be spent on determining which materials are solid wastes and which solid wastes are hazardous wastes.

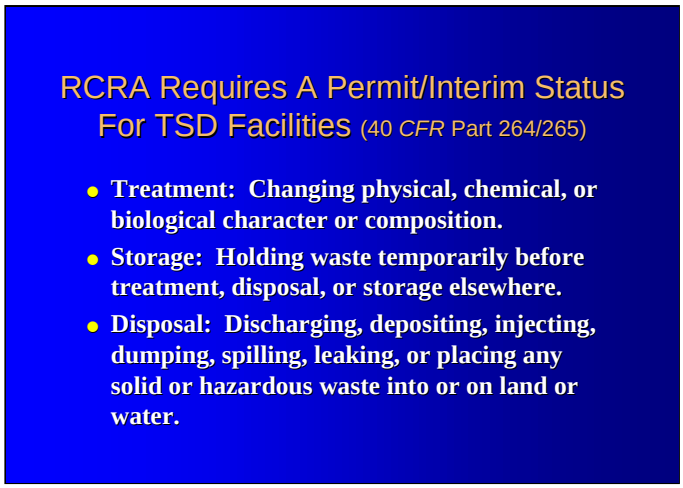


Under 40 *CFR* 260.10, a generator is "any person, by site, whose act or process produces hazardous waste identified or listed in Part 261 of this chapter or whose act first causes a hazardous waste to become subject to regulation." After a generator determines that his/her wastes are hazardous, the generator must notify the EPA/state of its hazardous waste management activities. As a result of the notification, the facility receives an EPA identification number that must be used on its reports and manifests.

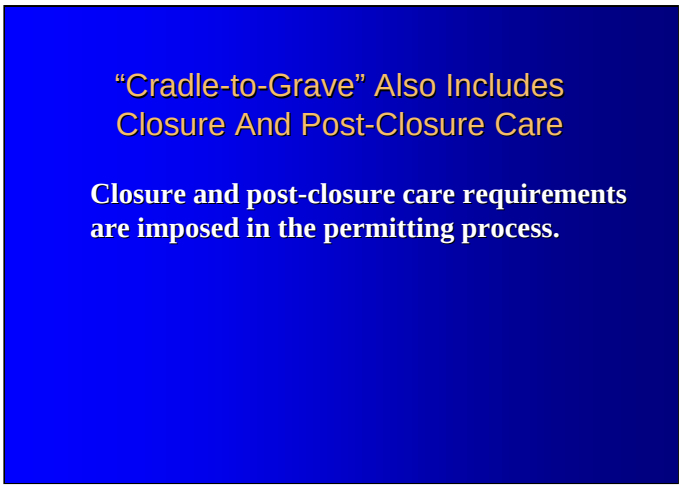
The generator must also document its hazardous waste management activities. Record keeping (i.e., documentation) is a fundamental element of accountability under the RCRA program. Documentation of hazardous waste activities includes producing and maintaining manifests that accompany off-site shipments of wastes. Generators must also submit reports to the EPA/state that identify the types and quantities of wastes generated and the on-site and off-site management of these wastes. Generators must ensure that off-site management facilities and transporters comply with RCRA's hazardous waste management standards.



EPA transporter requirements are in 40 *CFR* Part 263. Transporters must also comply with Department of Transportation (DOT) requirements in 49 *CFR*, especially parts 171 through 179.



Facilities that conduct one or more of the activities encompassed by the referenced definitions require a permit or interim status, unless the facility/activity is specifically excluded from permitting/interim status under 40 *CFR* 264.1/265.1 and 270.1.

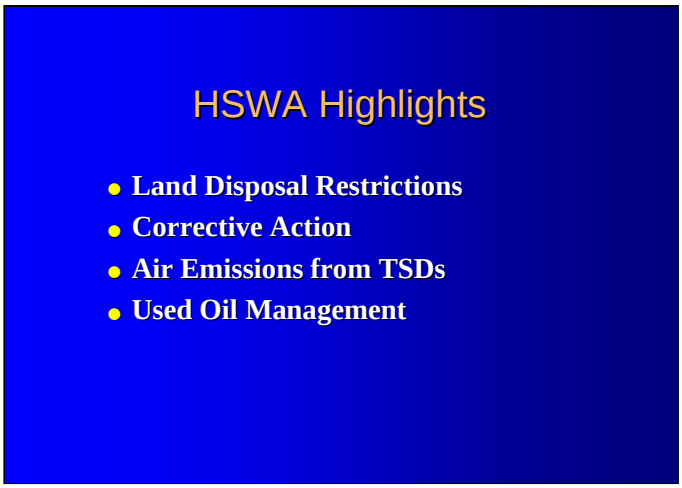


RCRA regulates the active life of a hazardous waste management unit, and also stipulates specific requirements that must be met to take a unit out of service (i.e., close the unit). Closure of the unit must be conducted according to an approved closure plan, and a registered professional engineer must certify that the unit is closed according to the closure plan.

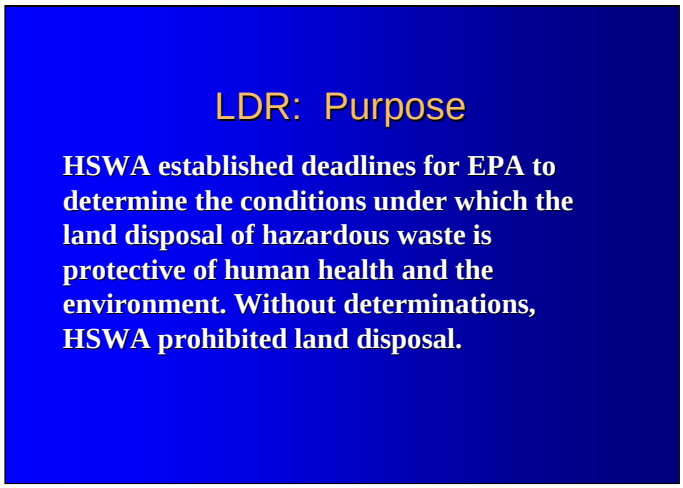
Closure can be conducted under interim status (Part A) or Part B permit standards. For facilities that obtain a Part B permit, the closure plan becomes an enforceable condition of the permit.

Closure can involve removal of remaining wastes and decontaminating and/or disposing of all structures associated with the unit so that no residues remain. Such closure is referred to as a clean closure, and RCRA requires no further monitoring or management for the unit. Although the precise meaning of decontamination is currently determined on a case-by-case basis, if structures or equipment are destined for land disposal, hazardous debris treatment technologies (e.g., chemical extraction) that result in a "clean debris surface" may be appropriate. If, however, wastes remain in the unit (as they likely would remain in a landfill), RCRA requires management of the unit under a post-closure care permit. Such permits will be discussed later in the permitting module of the RCRA Orientation Course. Facilities must monitor the closed unit for releases from the unit and maintain the closed unit during a performance period of at least 30 years. A release occurring during that period may result in extension of the post-closure care period.

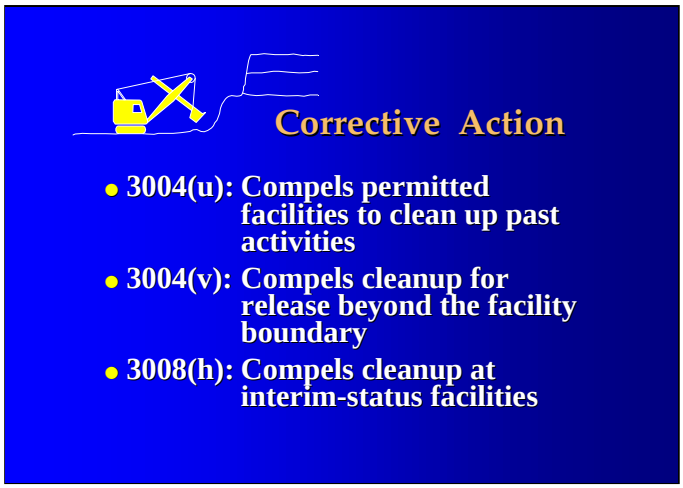
Have cradle-to-grave provisions changed?



The Hazardous and Solid Waste Amendments of 1984 (HSWA) imposed additional requirements under RCRA authority. The goals of several of these additional requirements are protection of groundwater from releases from hazardous waste management units and minimization of future potential for such releases. The land disposal restrictions contribute to protection of groundwater by requiring treatment of hazardous wastes to achieve specified constituent concentrations before land disposal. More stringent design and containment standards for land-based units also contribute to protection of groundwater. The corrective action (cleanup) requirements under Subtitle C (and Subtitle I discussed previously) reduce the source of contaminants that could migrate to groundwater.



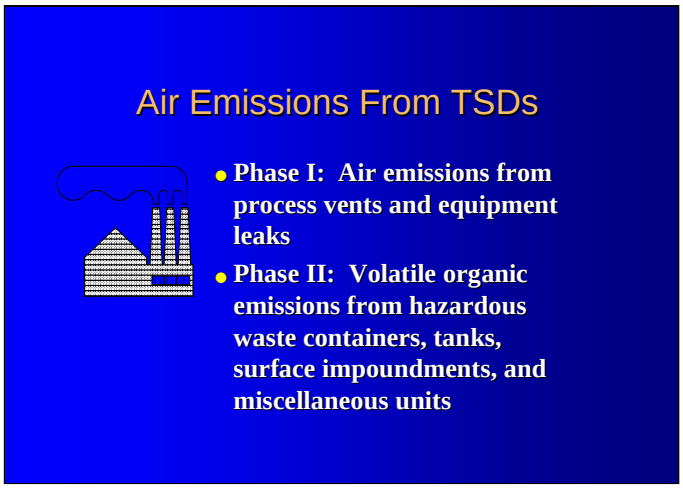
The land disposal restrictions (LDR) are the most dynamic of all Subtitle C provisions and have had widespread impact on compliance at DOE facilities. Because of its importance, LDR will be discussed at greater detail on Course Day 3.



HSWA provided three additional corrective action elements beyond the provision for correcting conditions of imminent and substantial endangerment under Section 7003, Imminent Hazard. Under 3004(u), Congress established authority for EPA to compel cleanup of releases of hazardous constituents from any solid waste management unit at a facility seeking a final RCRA permit. Under 3004(v), Congress authorized cleanup for releases beyond facility boundaries. Section 3008(h) compels cleanup at interim-status facilities. These provisions are discussed in greater detail in the permitting module.

Corrective action rules were proposed July 27, 1990 (55 FR 30798). A final rule addressing the concepts of corrective action management units (CAMUs) and temporary units (TUs) was published February 16, 1993 (58 FR 8658). The specifics of these concepts will also be discussed in the permitting module of the RCRA Orientation Course. A proposed rule to introduce EPA's strategy for promulgating additional corrective action regulations was published May 1, 1996 (61 FR 19432).

It should be noted that some federal facilities have both a RCRA permit **and** are on the National Priority List issued under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as "Superfund"). Such facilities must conduct cleanup activities in compliance with both RCRA and CERCLA. CERCLA is almost exclusively a federal program. RCRA, on the other hand, can be implemented by an authorized state. Thus, states and EPA could disagree on remedial actions. For federal facilities that are subject to both sets of requirements, responsibilities are assigned through federal facility agreements (FFAs), also referred to as interagency agreements (IAGs).



HSWA provisions directed EPA to develop regulations for monitoring and controlling air emissions from hazardous waste TSD facilities. EPA finalized the Phase I rule on June 21, 1990 (55 FR 25454). Phase I requirements are designed to reduce organic emissions from process vents associated with the treatment of hazardous wastes by distillation, fractionation, thin-film evaporation, solvent extraction, steam stripping, and air stripping, as well as from leaks in certain piping and equipment used for hazardous waste management processes. 40 *CFR* Parts 264/265, Subparts AA and BB, respectively.

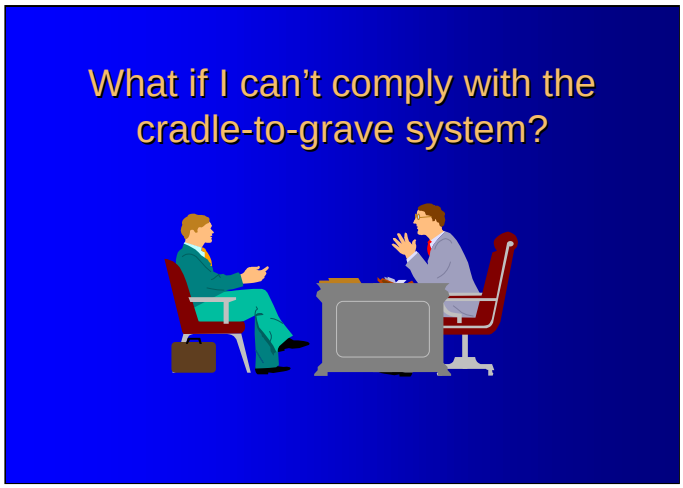
EPA finalized Phase II rules on December 6, 1994 (59 FR 62896). The Phase II final rule addresses management of volatile organics in surface impoundments, miscellaneous units, tanks, and containers at TSDs. Management of such wastes in generator 90-day accumulation tanks and containers will also be regulated. Requirements focus on design and operational controls to minimize emissions. Examples of such controls include floating roofs for large aboveground storage tanks and the use of DOT-approved containers at 90-day accumulation points. The Phase II final rule became effective December 6, 1996 (61 FR 59932). 40 *CFR* Parts 264/265 Subpart CC

Subsequent to the Phase II proposal, EPA realized that for standards such as these to be effective, they must have uniform coverage of applicability from the point of waste generation through the point where the organics in the waste are either recycled, removed, or destroyed. EPA has proposed to apply Phase II standards to land treatment units, landfills, and waste piles (57 FR 35948).

The Used Oil Recycling Act of 1980 and HSWA provide authority for regulating waste oil. On May 20, 1992, EPA promulgated regulations on the management of used oil effective June 19, 1992. In that rule making, EPA determined the following:

1. Used oils destined for disposal are not to be listed as hazardous waste. Such oils that fail the Toxicity Characteristic are hazardous waste.
2. Listing of residuals from the reprocessing and re-refining of used oil is deferred.
3. Certain used-oil filters are exempted from regulation as hazardous waste.

Another major revision of the requirements for the management of used oil destined for recycle was published September 10, 1992 (57 FR 41566). EPA established 40 *CFR* Part 279 to replace the management standards for used oil in 40 *CFR* Part 266. Portions of Part 279 do not go into effect in states authorized to implement the RCRA program until those states adopt the new standards. However, portions of 40 *CFR* 279 used oil regulations that have been recodified from 40 *CFR* Part 266, Subpart E, remain federally enforceable in all states, whether or not the state has adopted Part 279.



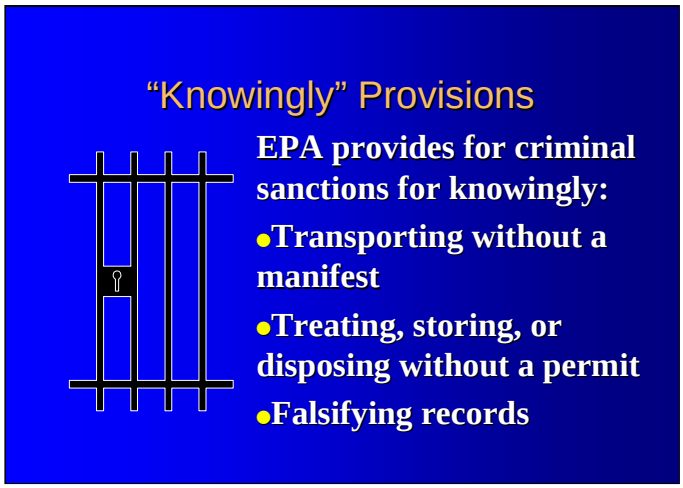
Thus far the overview has introduced the "cradle-to-grave" management system and highlighted the importance of understanding which wastes must comply with RCRA's hazardous waste management standards. The next important element in the RCRA overview is understanding enforcement authority that can be exercised when facilities fail to comply with RCRA's standards.

Section 3008(a) of RCRA provides for (1) the issuance of orders requiring compliance immediately or after a specified period and (2) the assessment of penalties for the failure to comply. In assessing such penalties, Congress authorized EPA to consider the seriousness of the violation and whether good faith efforts have been made by the owner/operator to comply. The RCRA Civil Penalty Policy provides guidelines for determining appropriate penalties.

Potential enforcement actions include revoking a permit, which could have substantial impact on a facility by shutting down operations that generate the wastes managed in the previously permitted unit.

In the past, EPA's authority to fine other federal agencies has not been clear. Cases in different federal district and circuit courts have resulted in different determinations, with some deciding that the federal government is immune to such penalties and others deciding that the waiver of sovereign immunity under RCRA allows EPA to fine federal agencies.

The Federal Facility Compliance Act of 1992 eliminated uncertainty over EPA/State authority to assess civil penalties against federal agencies. It makes clear that federal agencies are subject to monetary penalties to the same degree as the private sector for violations of federal, state, and local solid and hazardous waste laws.



Criminal sanctions under RCRA Section 3008(d) depend on establishing some level of knowledge of the action (i.e., the knowingly provisions). Establishing that the person (or corporation, etc.) knew that his action violated RCRA is not as difficult as one might think.

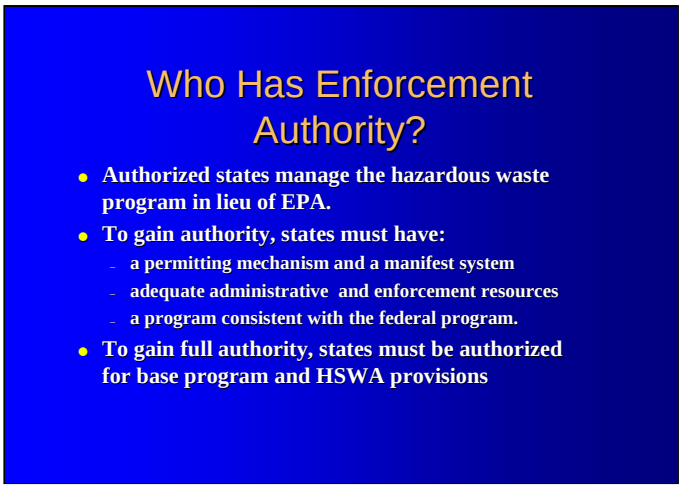
"Several courts have accepted the government reading of environmental statutes and have imposed direct liability on officers whose participation in wrongful acts is, at best, marginal. Courts have been willing to ignore traditional limits on corporate liability, and are holding corporate officers directly liable not only for their participation in or authorization of wrongful acts, but also imposing liability where the officers merely had power to control, or authority over, an activity." (J.F. Seymour. Civil and Criminal Liability of Corporate Officers under Federal Environmental Laws. May 9, 1989. Bureau of National Affairs, *Environment Reporter*)

Enforcement of criminal violations, however, also depends on prosecutorial discretion. The Department of Justice policy on prosecutorial discretion is outlined in "Factors in Decisions on Criminal Prosecutions for Environmental Violations in the Context of Significant Voluntary Compliance or Disclosure Efforts by the Violator," July 1, 1991. The policy is:

"intended to give the regulated community a sense of how the federal government exercises its criminal prosecutorial discretion with respect to such factors as the defendant's voluntary disclosure of violations, cooperation with the government in investigating the violations, use of environmental audits and other procedures to ensure compliance with all applicable environmental laws and regulations, and use of measures to remedy expeditiously and completely any violations and the harm caused thereby."

A maximum penalty of 5 years, for the first offense, is associated with knowingly: (1) transporting (or causing to be transported) hazardous waste to an unpermitted facility, and (2) treating, storing, or disposing without a permit or in violation of a material condition of a permit or interim status requirements.

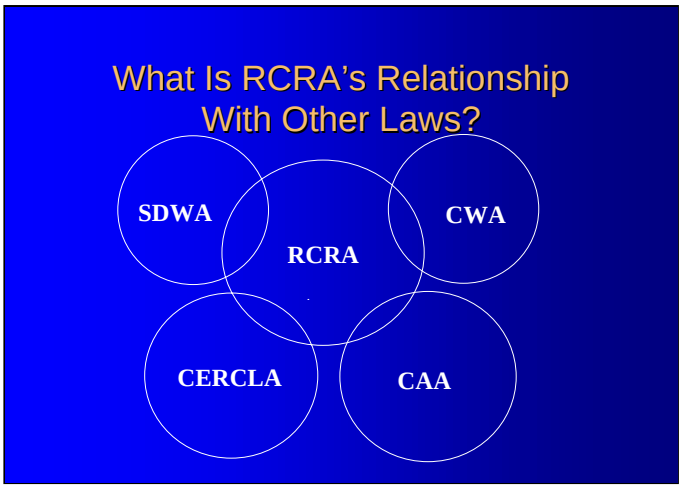
"Knowing endangerment" is a violation that places another person in imminent danger of death or serious bodily injury (RCRA Section 3008(e)).



To gain authority to implement RCRA, states must submit their programs to EPA for review and approval. The program must include all elements of the federal program, but can be more stringent. Differences between the state and federal programs, however, cannot create conflicts between the two; thus, state programs must be consistent with the federal program.

HSWA provisions have been implemented over a period of time. Consequently, states have gained authority over different provisions (e.g., corrective action, land disposal restrictions, etc.) in a piecemeal fashion.

It is important to remember that granting a state authority to administer the RCRA program does not preclude EPA from taking enforcement action. Generally, the most stringent interpretation of a regulation should be viewed as the governing standard.



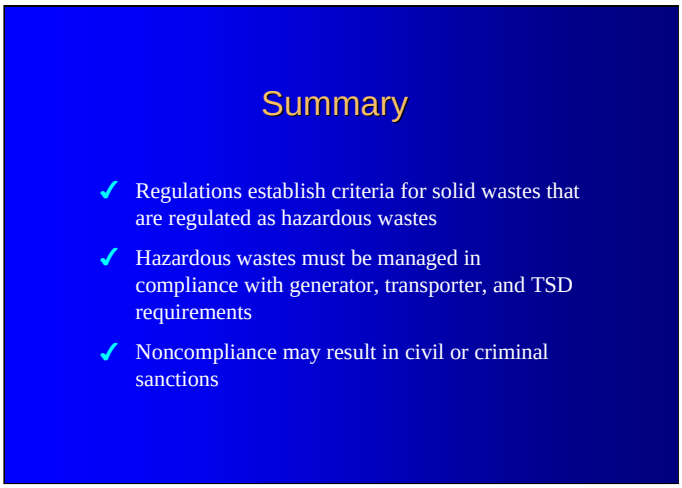
Two of the more difficult compliance issues for facilities are (1) identifying the overlapping requirements under different environmental laws and (2) ensuring that these requirements, even when duplicative, are met.

RCRA's requirements overlap with those of several other environmental laws. Under the Safe Drinking Water Act (SDWA), EPA has authority to permit underground injection wells. If those wells manage hazardous waste, those wells can be granted a permit-by-rule under RCRA. Under the permit-by-rule provisions, EPA deems a facility to have a RCRA permit without actually going through the RCRA permitting process.

Several overlaps exist between RCRA and the Clean Water Act (CWA) . Some exclusions from hazardous waste regulation are based on the assumption that compliance with the CWA is sufficiently protective.

RCRA and the Clean Air Act (CAA) overlap in their respective authorities over volatile organic emissions. RCRA facilities must also have CAA permits in some cases. A RCRA permit alone does not satisfy permitting requirements under the CAA.

Last, the overlap between CERCLA and RCRA is substantial. Both can address cleanup. Further, RCRA is an applicable or relevant and appropriate requirement (ARAR) to consider when developing cleanup standards and identifying waste management strategies under CERCLA.



This overview provides the outline for organizing more detailed information that follows.