RCRA

INFORMATION

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RCRA Information Brochure

Taken from a September 1985 EPA Report: "RCRA Information on Hazardous Wastes For Publicly Owned Treatment Works".

This brochure is designed to give you an understanding of the Resource Conservation and Recovery Act (RCRA) and how the Act affects you as an industry that generates or transports "hazardous" wastes. The brochure's intent is to provide you with basic guidance about applicable RCRA provisions. However, due to the Act's technical complexity, its staggered deadline for program implementation and compliance, and the potential for your state hazardous waste management program requirements to differ from federal regulations, questions will undoubtedly arise that require assistance beyond the brochure's scope. Questions or problems not completely addressed here should be referred to your state solids waste management office or the appropriate EPA regional office.

Congress enacted the Resource Conservation and Recovery Act in 1976 (and subsequently amended it in 1978, 1980, and 1984) to define a federal role in solid waste and resource management and recovery. The Act's primary goals are: (1) to protect human health and the environment from hazardous and other solid wastes; and (2) to protect and preserve natural resources through programs of resource conservation and recovery. Its principal regulatory focus is to control hazardous waste. To this end, RCRA mandates a comprehensive system to identify hazardous wastes and to trace and control their movement from generation through transport, treatment, storage, and ultimate disposal.

Extensive hazardous waste regulations have been promulgated under RCRA's authority. These regulations are codified under 40 CFR Parts 260, 261, 263, 264, 265, 266, and 270. Specifically, RCRA provisions are focused in the following way:

Part 260: General

Part 261: Hazardous waste identification and listing

Part 262: Hazardous waste generators
Part 263: Hazardous waste transporters

Part 264-265: Owners and operators of hazardous waste facilities

Part 266: Special requirements
Part 270: Hazardous waste permits

This brochure briefly outlines 40 CFR Parts 261, 262, and 263.

How To Determine If Your Waste Is Hazardous

As part of a comprehensive program to regulate hazardous wastes from "cradle to grave", Section 3001 of RCRA directs EPA to establish ways to determine what waste materials are considered hazardous for regulatory purposes. The Section 3001 regulates are codified in 40 CFR Part 261. In addition, 40 CFR Part 262 requires solid waste generators to determine whether their wastes are hazardous.

If your business generates any material which is discarded or disposed of, you must determine if that material is a "solid waste", according to the regulatory definition. In January 1985, EPA proposed its final definition of solid waste. According to this definition, "solid waste" is any material that is abandoned or being disposed of, burned, or incinerated -- or stored, treated, or accumulated before or in lieu of these activities. The term includes essentially all forms of waste (i.e., solids, liquids, semisolids, or contained gaseous substances).

In addition, most recycled materials are now considered solids wastes by EPA, depending on both the recycling activity itself and the nature of the recycling material. The following four types of recycling activities are potentially subject to RCRA regulation:

Uses, which actually constitute ultimate disposal (for example, land spreading of wastewater treatment sludges for fertilizer).

Burning waste or waste fuels for energy recovery or using wastes to produce a fuel.

Reclamation -- regeneration of wastes or the recovery of material from wastes.

Speculative accumulation -- either accumulating wastes that are potentially recyclable but for which no recycling (or no feasible recycling) market exists, or accumulated wastes before recycling unless 75 percent of the accumulated material is recycled during a one-year period.

Five categories of recycled (termed secondary) materials also fall under this solid waste definition:

Spent materials -- materials that have been used and no longer serve the purpose for which they were originally produced without being regenerated, reclaimed, or otherwise reprocessed. Examples include spent solvents and spent acids.

Sludges -- residues from pollution control processes, such as wastewater treatment sludges and air emission control wastes.

By-products -- residual materials resulting from industrial, commercial, mining, and agricultural operations that are not primary products, are not produced separately, and are not fit for a desired end use without substantial further processing. Examples are process residues from manufacturing or mining processes, such as distillation, column residues or mining slags.

Commercial chemical products -- products listed in 40 CFR Part 261.33 when they are recycled in ways that differ from their normal use.

Scrap metal -- metal parts discarded after consumer use or that result from metal processing operations. Examples include scrap automobiles and scrap radiators.

Some materials, however, are NOT considered solid wastes under RCRA, including domestic sewage or any mixture of domestic sewage and other wastes that pass through a sewer system to a POTW. Also excluded are wastes regulated under other federal laws, such as industrial wastewater discharged directly to public waters (which must be properly permitted) and many nuclear or radioactive materials (regulated by the Department of Energy and/or the Nuclear Regulatory Commission).

There are two ways to know if your waste is regulated as a hazardous waste under federal law:

If it exhibits one or more of the following four characteristics- ignitability, corrosively, reactivity, and toxicity (based on EPA extraction procedures)--it is considered a characteristic waste under RCRA.

If it (or any part of it) is listed in 40 CFR 261.33, it is commonly called a listed waste in RCRA regulations. EPA developed these lists of hazardous wastes based on what was known about specific chemicals and waste streams. Whether of not a waste is hazardous according to the characteristic wastes criteria, if your firm's waste appears on any of the lists, it is considered a listed hazardous waste. Thus, your firm must comply with the notification requirement of RCRA Section 3010 and with the requirements outlined in 40 CFR 262-266 and 270-271 (described below). Most listed substances appear on the list solely because they exhibit one or more of the characteristics of hazardous waste.

Whether a waste is regulated as a hazardous waste may also depend on two other factors. First, as 1984 RCRA amendments go into effect, some new wastes that previously were not regulated will come under hazardous waste regulation. Second, some states apply their own hazardous waste regulations. Thus, if you are in doubt about whether your waste is regulated under federal or state hazardous waste regulations, you should contact the state hazardous waste agency or EPA regional office.

RCRA Requirements Applicable If Your Industry Generates Hazardous Waste

Section 3002 of RCRA gives EPA authority to regulate generators of hazardous waste in order to protect human health and the environment. These regulations, in 40 CFR 262, specify hazardous waste management procedures for generators, including record keeping, labeling, use of appropriate containers, information reporting, and use of shipping manifests. Basic requirements for generators of hazardous waste are explained below.

These requirements for hazardous waste generators are also affected by whether EPA considers your facility to be a "small quantity generator". As of August 5, 1985, EPA distinguishes three classes of small quantity generators for regulatory purposes:

Those generating between 100 and 1,000 kilograms of nonacutely hazardous waste per calendar month.

Those generating up to 100 kilograms of nonacutely hazardous waste per calendar month.

Those generating less than one kilogram of acutely hazardous waste per calendar month.

In general, the latter two classes of small quantity generators are subject to less stringent requirements than establishments producing large quantities of hazardous waste. The small quantity generator exclusion is discussed in more detail below. If you have questions about how these regulations apply, contact your state hazardous waste agency or EPA regional office.

Notify EPA

If your facility generates, transports, treats, stores, or disposes of hazardous wastes and is not exempt from regulation, you must notify EPA or an authorized state and obtain an identification number. Most small quantity generators are not required to notify EPA. It is important to note that many states have regulations that differ from federal requirements. If your business is involved in hazardous waste activities, you should contact the appropriate state agency to determine which regulations are applicable to you.

The RCRA Amendments of 1984 extend notification requirements to industries covered by the Domestic Sewage Exemption, that is industries which discharge "solid and dissolved materials in domestic sewage" that would be defined as "hazardous waste" were they not mixed with domestic sewage and discharged to sewers. EPA has yet to formally implement this expanded notification requirement. If you fall under this exemption, you should periodically contact your state or EPA region to keep abreast of these impending notification requirements.

Off-site Disposal of Hazardous Wastes

If you generate, transport, treat, store or dispose of any hazardous wastes (and your waste activities are not exempt from regulation), you must comply with applicable federal, state, and local hazardous waste management requirements, both when the waste remains on your premise and when it is transported off-site. Basic requirements for the off-site disposal of hazardous wastes include:

Obtain EPA Identification Number -- Most federally regulated generators and transporters of hazardous waste must have EPA identification numbers. An EPA identification number is required prior to any transportation, treatment, storage, or disposal of hazardous waste. A generator must not deliver hazardous waste to any transporter or TSDF without an EPA identification number.

<u>Complete Manifests</u> -- Generators of hazardous waste are required to prepare a manifest containing the following information for each load of hazardous waste transported:

- Generator name, address, telephone number and EPA identification number.
- Transport name and EPA identification number.
- Name, address, and EPA identification number of permitted facilities receiving waste.
- Description of hazardous wastes transported.
- Waste quantities, types and number of containers.
- Certification for proper packaging, marking, labeling and transportation.
- Waste minimization certification.
- Manifest document number.

Upon delivery of waste to the transporter, the generator should sign and date the manifest, have the transporter sign the manifest, retain one copy, and provide the transporter with all remaining copies. A generator who does not receive, within 35 days, a manifest copy signed by the facility designated to receive the waste must contact the transporter or designated facility to determine what happened to the waste. A generator who has not received, within 45 days, a signed manifest copy must submit an exception report to the EPA region.

It is important to remember that, before transporting any hazardous waste off-site, a generator must comply with packaging, labeling, marking, and placarding requirements. RCRA pretransport requirements generally incorporate U.S. Department of Transportation regulations, described in 49 CFR Parts 171-172. In addition, all generators must keep records of any test results, waste analyses, or other determinations made in accordance with 40 CRF Part 262.11 for at least three years.

<u>Prepare Biennial Report</u> -- Generators that ship hazardous wastes off- site must prepare and submit a report to the appropriate EPA region by March 1 of each even-numbered year. This report covers hazardous waste generator activities during the previous odd-numbered calendar year. Some states require annual reports.

Exceptions and Exemptions to RCRA Regulations for Generators

If the wastes your business generates would normally be subject to hazardous waste regulations, they may be exempt in three specific circumstances:

Domestic Sewage Exemption. In order to regulate hazardous waste generators under 40 CFR 261.4(a), Materials that would normally be subject to hazardous waste regulations are exempt because they are not defined as "solid waste." Thus, the domestic sewage exception covers:

- "Untreated sanitary wastes that pass through a sewer system".
- Any mixture of domestic sewage and other wastes that passes through a sewer system to a POTW for treatment.

On-site treatment of disposal exemption. RCRA regulations contain a broad exemption for the on-site treatment and storage of wastewaters, including the following types of facilities:

- Wastewater Treatment Units -- Devices which: (1) are part of a waste water treatment facility subject to regulation under Sections 307 or 402 of the Clean Water Act (i.e., direct dischargers of wastewaters); (2) receive and treat or store hazardous influent wastewater, or generate and accumulate a hazardous wastewater treatment sludge, or treat or store hazardous wastewater treatment sludge, and (3) meet the EPA definition of a tank.
- <u>Totally Enclose Treatment Facilities</u> -- Facilities to treat hazardous waste which are directly connected to an industrial production process, and constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. EPA states that "a totally enclosed treatment facility" must: (1) be completely contained on all sides, (2) pose negligible potential for escape of constituents to the environment, (3) be connected directly by pipeline or similarly totally enclosed device to an industrial production process. The agency also indicates that effluent discharged to a POTW is exempt from RCRA regulation. However, it is subject to pretreatment regulations.
- <u>Elementary Neutralization Units</u> -- Devices used for neutralizing waste defined as hazardous solely because it is corrosive and which meets the definition of tank, container, transport vehicle or vessel in 40 CFR 260.10.

The treatment and storage exception cited above does not apply to any on- site facility, which does not qualify as a wastewater treatment unit, a totally enclosed treatment facility, or an elementary neutralization unit. Consequently, open storage facilities (e.g., waste piles of surface impoundments) and on-site disposal operations (e.g., landfills, land application, or incineration) are governed by storage and disposal facility requirements and RCRA permitting requirements.

Small quantity Generator Exclusion. EPA does not currently regulate generators of small quantities of hazardous waste as stringently as it regulates generators of larger quantities. Small quantity generators are exempt from notification, generator, transporter, TSDF, and RCRA permitting requirements. The agency now divides small quantity generators into three classes:

- Generators of less than one kilogram per month of acutely hazardous waste.

- Generators of less than 100 kilograms per month of nonacutely hazardous waste.
- Generators of between 100 and 1,000 kilograms per month of nonacutely hazardous waste.

The first two classes of hazardous waste generators waste generators are required only to perform a hazardous waste determination, store, treat, or dispose of hazardous waste on-site in accordance with regulations, or en- sure its delivery to an authorized hazardous or non-hazardous treatment, storage, or disposal facility.

The third class of generators, those who generate between 100 and 1,000 kilograms of hazardous waste per month, while still exempt from the bulk of RCRA requirements, are now required to accompany all off-site shipments of hazardous waste with a single copy of the Uniform Hazardous Waste Manifest (EPA Forms 8700-22 and 8700-22 A) or the state equivalent. This form must contain the following information:

- Name and address of the waste generator.
- U.S. Department of Transportation description of the waste, including shipping name, hazard class, and identification number (UN/NA).
- Number and type of containers.
- Quantity of waste in the shipment.
- Name and address of the facility designated to receive the waste.

Although EPA does not regulate small quantity generators as stringently as large quantity generators, several states have small quantity generator requirements which are more stringent than federal requirements. Thus, if you have any questions about requirements for hazardous waste management, you should contact the state hazardous waste agency or EPA.

RCRA Requirements Applicable If Your Industry Transports Hazardous Waste

EPA, the U.S. Department of Transportation, and many states regulate transportation of hazardous waste in order to protect human health and the environment from hazardous waste releases. EPA's regulatory authority for transporters is based on Section 3003 of RCRA. EPA and the Department of Transportation have jointly set standards for hazardous waste trans- portation, which are described in 40 CRF Parts 262 and 263, and 49 CFR Parts 171 and 172. These standards include record keeping, labeling, and manifest requirements, as well as the requirement to transport hazardous wastes only to permitted facilities for treatment, as designated on hazardous waste shipping manifests Hazardous waste transporters hauling wastes to POTW collection systems or treatment plants must ensure that these wastes meet all local, state, and federal pretreatment standards, in addition to RCRA requirements.

Notification to EPA and EPA Identification Number

If your firm transports hazardous waste, you must notify EPA or an authorized state hazardous waste agency and obtain an EPA identification number. Transporters must not move hazardous wastes without an EPA identification number. EPA regional offices have special procedures to issue provisional identification numbers to generators and transporters of hazardous waste under emergency or other unusual circumstances when it becomes necessary to transport the waste to an authorized hazardous waste management facility. In emergency situations, the transporters should telephone the EPA regional office and obtain a provisional identification number and additional instruction.

Manifests and Reports

Transporters may not accept hazardous waste from generators unless each load is accompanied by a completed manifest. The manifest must accompany the hazardous waste at all times. Upon delivery of the hazardous waste to another transporter or designated facility, transporters must:

Have the new transporter or owner/operator of the designated facility sign and date the manifest.

Retain one copy of the manifest and give the remaining copies to the transporter or facility accepting the waste.

Transporter of Generator Agreements with Designated Facilities

In many cases, treatment, storage, and disposal facilities (including POTWs) will accept deliveries of hazardous waste <u>only</u> if they have agreements with transporters and/or generators. These agreements may designate types, strengths, and quantities of hazardous waste which the facility will accept, limit conditions of waste to be accepted (for example, "no liquid hazardous wastes"), designate times and locations for accepting deliveries, and designate treatment, storage, or disposal fees. Hazardous waste transporters are legally responsible for delivery of the entire quantity of hazardous waste accepted from a generator or another transporter to the facility designated by the manifest, or to designated alternate facilities. Before accepting any consignment of hazardous waste for transportation, you should make sure that the treatment, storage, or disposal facility designated on the manifest or an alternate designated facility will accept delivery of your waste.