

Introduction to  
**Generators**  
(40 CFR Part 262)



# GENERATORS

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## 1. INTRODUCTION

The Resource Conservation and Recovery Act (RCRA) sets forth an approach for handling the volumes of waste generated in the United States each year. Based on the authority granted by RCRA Subtitle C, EPA developed regulations for the cradle-to-grave management of hazardous waste. Persons who produce hazardous waste, called hazardous waste generators, are the first link in this cradle-to-grave system. The RCRA regulations establish basic hazardous waste management standards for generators. The generator regulations ensure that hazardous waste is appropriately identified and handled safely to protect human health and the environment, while minimizing interference with daily business operations. A solid foundation in the generator regulations is critical to a thorough understanding of the regulations governing the management of hazardous waste from the moment it is produced, or the point of generation, through final disposition.

When you have completed this module, you will be able to explain the definitions and regulations that apply to generators of hazardous waste. Specifically, you will be able to:

- define the terms "generator" and "co-generator"
- list the three classes of generators, outline the different generation and accumulation limits, and provide specific regulatory citations
- define episodic generation
- explain the use of EPA identification (ID) numbers and manifests
- outline the accumulation standards, define "empty tank" and "start time" for waste accumulation purposes, and identify regulations pertaining to accumulation in tanks, containers, containment buildings, and on drip pads
- define "satellite accumulation" and provide the applicable Federal Register citations
- cite the CFR section covering recordkeeping and reporting requirements for generators
- recognize copies of notification forms and manifests, and explain how they are obtained.

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

## 2. REGULATORY SUMMARY

The RCRA regulations establish a comprehensive hazardous waste management system under the authority of RCRA Subtitle C. RCRA regulates hazardous waste from its point of generation through its point of final disposal. Hazardous waste generators are the first link in the cradle-to-grave hazardous waste management system. Pursuant to the authority granted by RCRA §3002(a), EPA has developed generator standards that address on-site accumulation of hazardous waste, cradle-to-grave tracking (manifest system), labeling, and recordkeeping and reporting requirements. These standards are found in 40 CFR Part 262.

Recognizing that generators produce waste in different quantities, Congress established three categories of generators in the statute: large quantity generators (LQGs), small quantity generators (SQGs), and conditionally exempt small quantity generators (CESQGs). The extent of regulation to which hazardous waste generators are subject depends on the volume of hazardous waste each generator produces. This module defines the three classifications of generators and explains the varying degree of regulation to which each is subject.

In order to fully understand the responsibilities of hazardous waste generators, we first need to review the hazardous waste determination process.

### 2.1 HAZARDOUS WASTE DETERMINATION

As discussed in other modules, §262.11 requires generators to determine if their wastes are hazardous. The hazardous waste determination requirement applies to *all* generators of solid waste. Section 262.11 sets forth the following three-step hazardous waste determination process that any person who generates a solid waste, as defined in §261.2, must follow. First, the generator must determine if the solid waste is excluded from RCRA regulation in §261.4. Second, if the waste is not excluded, the generator must determine if it is listed in Subpart D of Part 261. Third, for purposes of compliance with the land disposal restrictions or if the waste is not listed in Subpart D of Part 261, the generator must identify all relevant hazardous waste characteristics in Subpart C of Part 261. The modules entitled Hazardous Waste Identification, Definition of Solid Waste and Hazardous Waste Recycling, and Solid and Hazardous Waste Exclusions together present the process of hazardous waste determination in detail. It is the generator's responsibility to determine if his or her wastes are defined as hazardous and therefore subject to regulation under Subtitle C. As discussed in Sections 2.3 and 2.4 of this module, once a generator determines a material meets the definition of a hazardous waste, the generator must determine the extent of regulation to which he or she is subject.

Generators are not required to perform analytical testing to identify their wastes. They are, however, required to accurately characterize their wastes. This means they may make a hazardous waste determination by testing *or* applying their knowledge of the waste's chemical and physical properties as specified in §262.11 (e.g., knowledge of the process, inputs, reactions, or operating status for the day).

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## 2.2 DEFINITION OF GENERATOR

Section 260.10 defines a generator as "any person, by site, whose act or process produces hazardous waste identified or listed in Part 261 or whose act first causes a hazardous waste to become subject to regulation." This definition contains three important terms you need to understand to apply the generator regulations.

The first term, "by site," refers to *where* a hazardous waste is generated. The regulations do not explicitly define the term "site." EPA tracks hazardous waste generation on a site-specific basis or by "individual generation site." To do this, EPA issues unique identification numbers to identify generators by site. Activities occurring under the control of an owner or operator on a single piece of property should be evaluated collectively for hazardous waste generation. For example, if Company A operates three laboratories on a single piece of property, all three laboratories may share one EPA ID number, and the waste from all three laboratories may be evaluated together. If, however, Company A operates three laboratories at three different locations that are not considered to be on contiguous property, each laboratory is viewed as a separate potential generator and is required to obtain an individual EPA ID number.

The second term is "person." Person is defined in §260.10 as "an individual, trust, firm, joint stock company, federal agency, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision of a state, or any interstate body." The definition of person encompasses any entity involved with a process that generates hazardous waste.

The third key component of the generator definition is the phrase "act or process." Because a generator is defined as the person whose *act or process* first causes a hazardous waste to become *subject to regulation*, sometimes the generator of a waste may not necessarily be the person who actually produced the waste. For example, if a cleaning service removes residues from a product storage tank excluded in §261.4(c), the person removing the residues is the first person to cause the waste to become subject to regulation, not the owner of the tank (i.e., the person who produced the waste).

### CO-GENERATORS

In the above residue removal example, the person removing the waste from the unit is not the owner or operator of the unit, but he or she may be considered a generator. The owner or operator of the unit may also be considered a generator since the act of operating the unit led to the generation of the hazardous waste. In other words, both the remover of the waste and the owner or operator of the tank are considered to be co-generators. In cases where one or more persons meet the definition of generator, all persons are jointly and severally liable for compliance with the generator regulations. The parties may through a mutual decision have one party assume the duties of generator, but in the event that a violation occurs, all persons meeting the definition of generator could be held liable for the improper management of the waste (45 FR 72024, 72026; October 30, 1980).

## 2.3 THREE GENERATOR CLASSIFICATIONS

The original generator regulations, published on May 19, 1980, set forth comprehensive requirements for those persons who generated 1,000 kg or more of hazardous waste in a calendar month (45 FR 33142). These regulations also included generators who produced more than 1 kg of acute hazardous waste in a calendar month. Persons generating less than 1,000 kg of hazardous waste (or less than or equal to 1 kg of acute hazardous waste) in a calendar month were granted a conditional exemption and subject to reduced regulatory requirements.

Congress amended the definition of generator in the Hazardous and Solid Waste Amendments of 1984 (HSWA), requiring EPA to regulate more stringently persons who generate between 100 and 1,000 kg of hazardous waste in a calendar month. On March 24, 1986, EPA issued final regulations establishing a third class of generators (persons generating 100-1,000 kg per month), and narrowed the scope of the conditional exemption to include only persons generating 100 kg or less of hazardous waste in a calendar month (51 FR 10146). Generators who produce 1 kg or less of an acute hazardous waste were also granted the conditional exemption.

Generators now fall into one of three general groups according to the amount of waste generated in a calendar month. The three classes of generators are described in Table 1. Since the regulations become increasingly stringent as the volume of waste generated grows, accurate counting of the waste is critical. This complex counting issue will be addressed in the next section of the module.

**Table 1**  
**QUANTITY DETERMINES WHICH REGULATIONS APPLY**

<b>Generator</b>	<b>Quantity</b>	<b>Regulation</b>
Large Quantity (LQG)	$\geq 1,000$ kg/month (approximately 2,200 lbs) $> 1$ kg/month acute (approximately 2.2 lbs) $> 100$ kg residue or contaminated soil from cleanup of acute hazardous waste spill	All Part 262 Requirements
Small Quantity (SQG)	Between 100-1,000 kg/month (approximately 220-2200 lbs)	Part 262, Subparts A, B, C (§262.34(d) is specific to SQGs); and Subparts E, F, G, H if applicable; and portions of Subpart D as specified in §262.44
Conditionally Exempt Small Quantity (CESQG)	$\leq 100$ kg/month $\leq 1$ kg acute $\leq 100$ kg residue or contaminated soil from cleanup of acute hazardous waste spill	§261.5

## **LARGE QUANTITY GENERATOR**

LQGs produce 1,000 kg or more of hazardous waste per calendar month, or more than 1 kg of acutely hazardous waste (i.e., waste codes denoted with the hazard code "H" and all P-listed wastes). Wastes from these generators are subject to full regulation in Part 262.

## **SMALL QUANTITY GENERATOR**

SQGs produce between 100 and 1,000 kg of hazardous waste per calendar month and are subject to modified regulations found in Part 262. Generally, SQGs must comply with some but not all of the regulations that apply to LQGs. Simplified requirements are specified for SQGs in place of some LQG requirements.

## **CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR**

CESQGs produce 100 kg or less of hazardous waste per calendar month. In addition, generators who produce 1 kg or less of acutely hazardous waste, or 100 kg or less of contaminated soil, waste, or debris resulting from the cleanup of an acute hazardous waste spill, are CESQGs. CESQGs are exempt from Parts 262 through 270 if they comply with the requirements in §261.5.

## **EPISODIC GENERATORS**

Generators may periodically exceed or fall below their normal generation limits in any given calendar month. If the amount of waste generated in a given calendar month places the generator in a different category, he or she is responsible for complying with all applicable requirements of that category for all waste generated during that calendar month. For example, if a generator produces 300 kg of hazardous waste in March, that waste must be managed in accordance with the SQG regulations; if the same generator produces 1,500 kg of hazardous waste in April, that waste must be managed in accordance with the LQG regulations (51 FR 10146, 10153; March 24, 1986).

## **2.4 COUNTING WASTE**

Generators must count the quantity of hazardous waste generated each month in order to determine their generator classification. The regulations stating which hazardous wastes are counted in a generator's monthly quantity determination are found in §261.5(c) and (d). All generators must comply with the counting requirements found in §261.5(c) and (d), even though the counting requirements are found in the section of the regulations that primarily applies to CESQGs.

A generator must include all hazardous waste that it generates, except hazardous waste that:

- is exempt from regulation in §§261.4(c) through (f), 261.6(a)(3), 261.7(a)(1), or 261.8
- is managed immediately upon generation only in on-site elementary neutralization units,

- wastewater treatment units, or totally enclosed treatment facilities as defined in §260.10
- is recycled, without prior storage or accumulation, only in an on-site process subject to regulation in §261.6(c)(2)
- is used oil managed under the requirements in §261.6(a)(4) and Part 279
- is spent lead-acid batteries managed under the requirements in Part 266, Subpart G
- is universal waste managed pursuant to §261.9 and Part 273.

To avoid double counting, §261.5(d) states that the following types of waste need not be counted when determining generator classification. All of these wastes have already been counted when they were initially generated:

- hazardous waste when removed from on-site storage
- hazardous waste produced by on-site treatment (including reclamation) as long as the hazardous waste was counted once
- spent materials generated, reclaimed, and subsequently reused on site, as long as the spent material is counted once during the calendar month.

## 2.5 ACCUMULATION STANDARDS

Storage of hazardous waste generally requires a permit under the RCRA regulations. There are, however, provisions under RCRA that allow generators to "accumulate" hazardous waste on site without a permit as long as they comply with certain management standards for their accumulation unit(s) and for their facility, such as a contingency plan and personnel training requirements. The length of time a generator is allowed to accumulate his or her waste will vary depending on the generator's classification, as illustrated in Table 2. The regulations pertaining to accumulation of hazardous waste on site are found in §262.34 for LQGs and SQGs, and in §261.5 for CESQGs.

**Table 2**  
**TYPE OF GENERATOR DETERMINES LENGTH OF ACCUMULATION TIME**

Generator	On-site Accumulation Time	On-site Quantity Limit
Large Quantity	≤ 90 days on site	No Limit
Small Quantity	≤ 180 days on site or ≤ 270 days if shipped 200 miles or more	6,000 kg

Conditionally Exempt Small Quantity	N/A	1,000 kg 1 kg acute 100 kg residue or contaminated soil from cleanup of acute hazardous waste spill
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## ACCUMULATION UNITS

LQGs accumulating hazardous wastes pursuant to §262.34 may only do so in containers, tanks, containment buildings, or on drip pads. SQGs may only accumulate waste in tanks or containers. If SQGs wish to accumulate waste in containment buildings or on drip pads, then they must meet the LQG standards. While these units do not need RCRA storage permits when used for generator accumulation, they must comply with certain standards found in the Part 265 requirements for interim status units, such as release detection and prevention requirements. Generators who accumulate hazardous waste in containers must comply with certain sections in Part 265, Subpart I. Generators who accumulate hazardous waste in tanks must comply with certain sections in Part 265, Subpart J, potentially including secondary containment and release detection. Generators who accumulate hazardous waste in containment buildings must comply with Part 265, Subpart DD. Generators who accumulate hazardous waste on drip pads must comply with Part 265, Subpart W; only generators managing wood preserving wastes may use drip pads for hazardous waste accumulation. All accumulation containers and tanks must be labeled or marked "Hazardous Waste" (§262.34(a)(3)). Finally, LQGs must comply with the air emission control requirements in Part 265, Subparts AA, BB, and CC, for accumulation tanks and containers (§262.34(a)(1)(i) and (ii)). The modules entitled Tanks, Containers, Drip Pads, Containment Buildings, and Air Emissions provide additional information on the hazardous waste unit standards.

The time period for generator waste accumulation starts when waste is first placed in or on the empty accumulation unit (e.g., tank, container, drip pad, or containment building). Tanks and containers must be marked with the date accumulation begins (51 FR 10146, 10160; March 24, 1986). In order to avoid exceeding the time limits when accumulating in a tank, the generator should fully empty the tank every 90, 180, or 270 days, as appropriate (47 FR 1248; January 11, 1982). All wastes must be removed from drip pads and their associated collection systems at least once every 90 days (§262.34(a)(1)(iii)(A)).

## SATELLITE ACCUMULATION

Prior to consolidation in the generator's waste accumulation area, §262.34(c) allows generators to accumulate hazardous waste at or near the point where it is initially generated and collected during daily operations (49 FR 49568; December 20, 1984). A person may accumulate up to 55 gallons of hazardous waste or 1 quart of acute hazardous waste at each satellite accumulation area, if it is under the control of the person operating the process that generates the waste. Limited standards, such as labeling and maintaining the container in good condition, apply to satellite areas (§262.34(c)(1)(i) and (ii)). Once the 55-gallon or 1 quart limit is exceeded at the satellite area, the excess waste must be dated and moved within three days to the central accumulation area where §262.34 standards apply (or the waste can be shipped directly off site). The accumulation limit is 55 gallons, regardless of the size of the container used.

## ACCUMULATION TIME LIMITS

Pursuant to §262.34(a), an LQG is allowed to accumulate hazardous waste on site for up to 90 days in specified units without obtaining a storage permit or interim status, provided he or she complies with Part 265 management standards for specific units as specified in §262.34. (It is important to note, however, that generators that accept waste from other generators or from off-site locations are owners or operators of storage facilities subject to Parts 264 and 265.)

An SQG may accumulate up to 6,000 kg of hazardous waste for 180 days or less without a storage permit or interim status if he or she complies with the modified standards in §262.34(d). If the TSDF is 200 miles or more away, the generator may accumulate hazardous waste for 270 days or less (§262.34(e)). Note that these extended time limits only apply to SQGs accumulating waste in tanks or containers. SQGs who accumulate waste in containment buildings or on drip pads are subject to the accumulation standards for LQGs.

Generators may receive a 30-day extension to their 90-day, 180-day, or 270-day accumulation period if uncontrollable and unforeseen circumstances cause them to accumulate waste on site for longer than the allowed time period. Such an extension may be granted by a Regional Administrator or authorized state on a case-by-case basis (§262.34(b) and (f)). An example of an uncontrolled or unforeseen circumstance is a truckers' strike preventing the shipment of waste off site.

LQGs and SQGs accumulating waste beyond the authorized time limits for their categories become subject to the requirements in Parts 264 and 265, and the permitting provisions in Part 270. An SQG who accumulates more than 6,000 kg during the authorized period is also subject to the applicable storage facility regulations in Parts 264 and 265, and the permitting provisions of Part 270.

## TREATMENT WITHOUT A PERMIT

EPA interprets the accumulation provisions in §262.34 as allowing generators to accumulate their waste for the allotted time period and to treat their waste in the accumulation unit, provided the generator complies with the requirements in §262.34 as well as the unit-specific requirements in Part 265 for tanks, containers, or containment buildings. This interpretation allows generators to treat hazardous waste on site without obtaining a permit or interim status (51 FR 10146, 10168; March 24, 1986, and 57 FR 37194; August 18, 1992). Some states interpret "accumulation" to include only storage and not treatment, however, and these states may require the generator to obtain a permit in order to conduct treatment. Generators who treat wastes in accumulation tanks, containers, or containment buildings to meet the Part 268 land disposal restriction treatment standards must comply with §268.7(a)(5) and have a waste analysis plan on site (discussed further in the module entitled Land Disposal Restrictions). EPA has not extended the interpretation of accumulation to allow generators of wood preserving wastes to treat waste on drip pads because drip pads are intended to serve solely as a means of conveying treated wood drippage and other related wastes to an associated collection system. In addition, there is no definitive federal interpretation of accumulation to allow treatment in satellite accumulation units; thus, the decision should be made by the appropriate implementing agency. (Please note, however, that the regulations and policy letters that discuss generator treatment do not directly

address satellite accumulation units, and the structure of the regulations does not explicitly provide for it).

## GENERAL ACCUMULATION STANDARDS

LQGs accumulating hazardous waste on site pursuant to §262.34(a) must comply with the preparedness and prevention procedures in Part 265, Subpart C. These requirements include having an emergency coordinator and testing and maintaining emergency equipment. SQGs are also subject to the preparedness and prevention procedures in Part 265, Subpart C (§262.34(d)(4)).

LQGs must develop and maintain a contingency plan on site, as found in Part 265, Subpart D, which outlines the response procedures necessary to minimize the hazards posed by fires, explosions, or unplanned releases of hazardous waste from the facility (§262.34(a)(4)). Such a plan is not required for SQGs, although §262.34(d)(5)(iv) outlines appropriate response procedures.

LQGs must comply with the personnel training requirements referenced in §265.16. These regulations require facility personnel to complete classroom or on-the-job training to become familiar with proper hazardous waste management and emergency procedures for the wastes handled at the facility. SQGs must follow modified personnel training requirements in §262.34(d)(5)(iii).

### CESQGs

Hazardous waste generated by a CESQG is not subject to specific management standards (Parts 262-270) for accumulation under the federal hazardous waste regulations provided the CESQG does not accumulate more than 1,000 kg of hazardous waste (or more than 1 kg of acute hazardous waste, or more than 100 kg of spill residue from an acute hazardous waste) on site at any time. A CESQG who exceeds the 1,000 kg limit for hazardous waste becomes subject to the SQG requirements in §262.34(d) (§261.5(g)). On the other hand, a CESQG becomes subject to full regulation (i.e., large quantity generator regulations) when the quantity of waste accumulated exceeds any of the limits specified for acute hazardous wastes (§261.5(f)).

Section 261.5(f)(3) and (g)(3) state that CESQGs may either treat or dispose of their waste in an on-site facility, or ensure delivery to an off-site treatment, storage, or disposal facility. The on-site or off-site facility, if located in the United States, must be one of the following:

- a federally permitted or interim status hazardous waste treatment, storage, or disposal facility
- a facility that is located in an authorized state and that is authorized to manage hazardous waste
- a facility permitted, licensed, or registered by a state to manage municipal or non-municipal, non-hazardous solid waste
- a facility that beneficially uses, reuses, or reclaims the waste
- a universal waste handler or destination facility subject to the requirements in Part 273.

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## 2.6 PRE-TRANSPORT REQUIREMENTS

Before shipping hazardous waste off site to a RCRA facility for treatment, storage, or disposal, a generator must comply with numerous pre-transport requirements. These requirements include obtaining an EPA ID number, preparing a Uniform Hazardous Waste Manifest (EPA Form 8700-22), and complying with several Department of Transportation (DOT) requirements.

### EPA IDENTIFICATION NUMBERS

A generator must obtain an EPA ID number before treating, storing, disposing, or transporting (or offering for transport) hazardous waste. EPA ID numbers are site-specific numbers assigned to generators, transporters, and treatment, storage, or disposal facilities, and need only be obtained once, although the generator should update the state or Region if his or her waste activities change. CESQGs, however, are not required to obtain EPA ID numbers.

Each EPA ID number consists of twelve alphanumeric characters. The first two letters are simply the two-letter abbreviation for the state in which the facility is located; whereas, the third character is either a number or letter indicating the “type” of ID number (e.g., automatically generated by RCRAInfo). A nine-digit number uniquely associated with the site follows these first three characters. Emergency EPA ID numbers are also available in certain situations (45 FR 85022; December 24, 1980).

EPA ID numbers are obtained by filing Form 8700-12, "Notification of Regulated Waste Activity," with the appropriate EPA Regional or authorized state RCRA office. The notification forms are obtained from state or Regional offices or via the Internet.

### MANIFEST (EPA FORM 8700-22)

Generally, a generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal must prepare a Uniform Hazardous Waste Manifest. The manifest is a multiple-copy tracking document for hazardous waste shipments that is required by DOT and EPA. The manifest tracks the chain of custody for the waste from the point it leaves the generator to final disposition at a hazardous waste TSDf or a recycling facility. Each party that manages the waste signs the manifest and retains a copy, providing critical continuity between the generator and the receiving facility (Part 262, Subpart B). Once the chain is complete, the receiving facility returns a signed copy of the manifest to the generator. If a generator does not receive a copy of the manifest signed by the designated facility owner or operator within 45 days of the date the waste was accepted by the initial transporter (60 days for a SQG), he or she must file an exception report (§262.42). SQGs that have tolling agreements with recycling facilities and CESQGs are not required to use a manifest when shipping their waste off site. Additionally, the manifest requirements do not apply to the transportation of hazardous wastes on rights-of-way on or between contiguous properties, and along the perimeter of contiguous properties controlled by the same person (§262.20(f)).

A copy of the manifest forms and instructions for completing it are found in the Appendix to Part 262. All numbered sections on the manifest must be completed to meet federal requirements. The lettered sections are options that may be required by the generator's or receiving facility's

state. Since states may customize the manifest, §262.21 explains which state's manifest must be used when waste transportation is interstate. Federal EPA does not require hazardous waste codes to be included on the manifest, however state law may require waste codes.

## **DESIGNATED FACILITY**

According to §262.20, a generator must designate one facility on the manifest that is permitted to handle the waste described on the manifest. A designated facility, as defined in §260.10, is a federally or state-permitted treatment, storage, or disposal facility or a recycling facility as regulated pursuant to §261.6(c)(2) or Part 266, Subpart F. The generator may also designate an alternate facility in case the transporter cannot deliver the waste to the primary designated facility. If the transporter is unable to deliver the shipment to either facility on the manifest, the generator must designate a third facility.

## **"ON-SITE" TRANSPORTATION**

The Part 262 manifesting requirements do not apply to "on-site" transportation of hazardous waste. "On-site" is defined in §260.10 as:

- contiguous property — property that is one continuous plot of land or several plots of adjoining land
- noncontiguous properties with a private right-of-way under the control of the owner of the properties
- contiguous property divided by a road (public or private) with the property entrance and exit directly across from each other and perpendicular to the road (crossroads intersection).

In addition, manifests are not required for shipments of hazardous waste on rights-of-way on or between contiguous properties, and along the perimeter of contiguous properties controlled by the same person to facilitate transport of hazardous waste between contiguous sites that must be accessed by driving along a public road (e.g., university campuses, military bases) (§262.20(f)).

## **DEPARTMENT OF TRANSPORTATION REQUIREMENTS**

DOT requires that generators of hazardous waste subject to manifesting meet several requirements before transporting or offering hazardous waste for transport off site, including packaging (§262.30), labeling (§262.31), marking (§262.32), and placarding (§262.33). The DOT regulations are found in 49 CFR Parts 172 through 179.

## **2.7 REPORTING AND RECORDKEEPING**

Generators have several recordkeeping and reporting responsibilities in Subpart D of Part 262. These requirements specify the records a generator must keep and the length of time a generator must retain these records. In addition, SQGs have special requirements identified in §262.44.

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## REPORTING REQUIREMENTS

LQGs who ship hazardous waste off site to a TSD, or who treat, store, or dispose of hazardous waste on site, must submit a Biennial Report (EPA Form 8700-13A/B) to EPA by March 1 of each even-numbered year (§262.41). The Biennial Report compiles data collected from off-site shipments of waste during the previous calendar year. The report includes information such as the EPA ID number, name, and address of the generator; the EPA ID number of each TSD in the United States to which waste was sent during the period (as well as the quantity of hazardous waste sent); and the manner in which the waste will be treated.

As stated earlier, LQGs and SQGs may also need to submit exception reports pursuant to the requirements in §262.42. Finally, EPA may require the generator to submit additional reports or information pursuant to §262.43.

## RECORDKEEPING REQUIREMENTS

Under §262.40, the generator must keep a signed copy of the manifest for at least three years from the date the waste was accepted by the initial transporter. The generator must also retain a copy of each Biennial Report and Exception Report for a period of three years from the due date of the report. In addition to these requirements, a generator must keep records of any test results, waste analyses, or other determinations made in accordance with §262.11 for at least three years. These time periods are extended automatically during the course of any enforcement action.

## 2.8 EXPORT AND IMPORT REQUIREMENTS

Part 262 contains several provisions that apply to exporters and importers of hazardous waste. Part 262, Subpart E, applies to exporters of hazardous waste and is designed to ensure that hazardous waste is not exported to a foreign country without that country's prior consent. Part 262, Subpart F, contains the regulations that apply to importers of hazardous waste. Part 262, Subpart H, contains the regulations implementing the Organization for Economic Cooperation and Development (OECD) Decision Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations.

### EXPORTS

A person who is defined as a primary exporter per §262.51 must follow the requirements outlined in §§262.50 through 262.58, including specific notification of intent to export (§262.53) and proper notification as required by the land disposal restrictions program. Exporters must also ensure that they are in compliance with any applicable international trade agreements.

### IMPORTS

Any person who imports hazardous waste is considered the generator of the waste and must comply with the requirements in Part 262, as well as the special importer regulations in Subpart F. These special regulations require the importer to use the name and address of the foreign generator and the importer's name, address, and EPA ID number on the manifest. The

transporter and the U.S. facility arranging for the importation of the waste are both considered importers; however, the parties must agree on which one of the two will assume the generator duties.

## **OECD DECISION**

On April 12, 1996, EPA published a final rule establishing regulations to implement the OECD Decision (61 FR 16289). The OECD Decision requires member countries to establish regulations for hazardous waste exported to or imported from other member countries for recycling. As required by the OECD Decision, the regulations establish a graduated system (green, amber, red) of procedural and substantive controls when wastes move across national borders within the OECD for recovery (Part 262, Subpart H). Green-listed wastes are subject to basic controls for international commercial shipments. Amber- and Red-listed wastes require special notification to the destination and transit OECD member countries and also require extra information on tracking forms.

On May 21, 2002, OECD published a decision based upon that made revisions to the controls of transboundary movements of waste destined for recovery operations in order to harmonize procedures and requirements and to avoid duplicative activities with the Basel Convention. These revisions were made as a result of texts adopted by the Council at its June 14, 2001, and February 28, 2002, sessions. As part of these revisions, OECD incorporated the red list into the green and amber lists. EPA is considering changes to the existing regulations in Part 262, Subpart H, to address these revisions.

## **2.9 FARMERS**

Part 262, Subpart E, contains a special provision for farmers managing waste pesticides. A farmer disposing of waste pesticides from his or her own use which are hazardous wastes is not required to comply with the standards in Part 262 or with the standards in Parts 264, 265, 268, or 270 for those wastes, provided he or she triple rinses the containers in accordance with §261.7(b)(3), and disposes of the pesticide residue and rinsate on his or her own farm in a manner consistent with the disposal instructions on the pesticide label. If the label does not contain disposal instructions, the farmer may not dispose of the pesticide or rinsate on his or her property and must comply with Subtitle C regulations for disposal (45 FR 12722, 12732; February 26, 1980).

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### 3. SPECIAL ISSUES

A discussion of several complex generator topics can be found below.

#### 3.1 ACTIVE MANAGEMENT

In some instances, a waste may have been disposed of prior to becoming subject to hazardous waste regulation (e.g., a waste disposed prior to the effective date of the original Subtitle C regulations). Regardless of when a waste was generated or when it was disposed, any waste that exhibits a characteristic of hazardous waste or meets a hazardous waste listing description is a RCRA Subtitle C hazardous waste; the determining factor is whether the waste is "actively managed" on or after the date that the waste becomes subject to hazardous waste regulation (57 FR 37194, 37298; August 18, 1992). The term active management means physically disturbing wastes within a waste management unit or disposing of additional hazardous waste in existing units containing previously disposed wastes (57 FR 37194, 37298; August 18, 1992). For example, an F001 waste that was disposed in 1950 became a hazardous waste as of November 19, 1980, the effective date of the F001 listing. However, the waste is not subject to hazardous waste regulation unless the waste is physically disturbed (e.g., exhumed). Once a person excavates the waste, he or she is considered the generator since his or her act first caused the waste to become subject to hazardous waste regulation (refer back to the definition of generator in §260.10), and is subject to all applicable Part 262 requirements. This also applies to farmers who exhume waste on their property (See Section 2.9). Note that excavation of contaminated soil during routine construction operations, such as pipeline installation, may not be considered active management if the soil is redeposited into the same excavated area. Site-specific situations should be discussed with the implementing agency.

#### 3.2 CLOSURE STANDARDS

For each accumulation unit, generators must comply with certain disposal and decontamination requirements once they cease operating these units. These are known as closure requirements. LQGs must comply with the generic closure requirements in §§265.111(a) and (b) and 265.114, and the unit-specific closure requirements found in Part 265, Subpart I (containers), Subpart J (tanks), Subpart W (drip pads), and Subpart DD (containment buildings). The closure requirements include removing and decontaminating all contaminated equipment, structures, and soil to minimize the need for further maintenance and prevent post-closure escape of hazardous waste. There are no specific closure requirements for SQGs and CESQGs, except that SQGs are subject to special requirements for accumulating hazardous waste in tanks, including closure.

### **3.3 WASTE MINIMIZATION**

One of the mandates of RCRA is to reduce or eliminate the generation of hazardous waste as expeditiously as possible (RCRA §1003(b)). Hazardous waste generators, when preparing a manifest, are required to certify that they have taken steps to minimize the amount of hazardous waste that they generate. LQGs must certify that they have "a program in place" to reduce the volume and toxicity of the hazardous waste they generate; SQGs must certify that they have made a good faith effort to minimize their waste generation. EPA outlined six basic elements that should be included in a waste minimization program in the May 28, 1993, Federal Register (58 FR 31114).

### **3.4 AIR EMISSION STANDARDS**

Generators accumulating hazardous waste in tanks and containers may have to comply with requirements for controlling hazardous air emissions from these units. With the promulgation of the Subpart CC air emission standards (59 FR 62896; December 6, 1994) and amendments (61 FR 59932; November 25, 1996; and 62 FR 64636; December 8, 1997; and 64 FR 3382; January 21, 1999), LQGs must comply with all applicable air emission standards in Part 265, Subparts AA, BB, and CC. These regulations are discussed in detail in the module entitled Air Emissions.

### **3.5 STANDARDS FOR GENERATORS OF F006 WASTE**

In order to promote legitimate recycling of metal-bearing electroplating sludges EPA promulgated less stringent regulations for generators of F006 waste (65 FR 12378; March 8, 2000). LQGs are allowed to accumulate F006 sludges up to 180 days (270 days if the waste must be shipped more than 200 miles) without a permit provided that they meet certain conditions. Specifically, LQGs must:

- recycle the F006 by metals recovery
- implement pollution prevention practices that reduce the amount of hazardous substances, pollutants and contaminants contained in the F006 waste prior to recycling
- accumulate no more than 20,000 kg of F006 on site at any one time
- comply with all of the management standards in §262.34(g).

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## 4. REGULATORY DEVELOPMENTS

### 4.1 REVISIONS TO THE HAZARDOUS WASTE MANIFEST

On March 4, 2005, EPA announced modifications to the Uniform Hazardous Waste Manifest System (70 FR 10776). The revisions establish new manifest tracking procedures for certain hazardous waste shipments and revise the manifest and continuation sheet forms (Forms 8700-22 and 22a) used to track hazardous waste from a generator's site to the site of waste disposition. The revisions announced in the final rule will:

- standardize the content and appearance of the manifest form and continuation sheet (Forms 8700-22 and 22a)
- make the manifest form available from a greater number of sources
- adopt new procedures for tracking certain types of waste shipments with the manifest, including waste that a destination facility rejects, wastes consisting of residues from non-empty hazardous waste containers, and wastes entering or leaving the United States.

There will be an 18-month transition to the new form. During this 18-month periods, handler and states will only use the old form. They will continue to acquire the old forms from the sources they use now. After September 5, 2006, only the new manifest form and requirements established under this rule will be valid and acceptable for use.

Handlers will obtain new forms from any source that has registered with EPA to print and distribute the form. EPA will not distribute forms; rather, the Agency will oversee the printing requirements and ensure that registered printers follow them. EPA will maintain a list of entities that have been approved to print/distribute the form, so that the public may acquire the forms from one of the approved printers. Some large waste firms are expected to register to print their own forms so that they can use them wherever they do business, instead of having to buy the manifests from different States, as is the current practice. States may also register to print the new form, but State rules cannot establish the state as the exclusive source of the forms. A handler may use a manifest from any registered source.

The proposed revisions to the Uniform Hazardous Waste Manifest System included an option to complete, send, and store the manifest information electronically (66 FR 28240; May 22, 2001). However, EPA decided to separate the e-manifest from the form revisions portion of the final rulemaking. As a result, the March 4, 2005, rule finalizes only the manifest form revisions. Final action on the e-manifest will be based on the results of continuing analysis and outreach on several key rulemaking issues that are fundamental to the ultimate decision regarding whether EPA will adopt the e-manifest.

### 4.2 BURDEN REDUCTION INITIATIVE

On January 17, 2002, EPA proposed to reduce the recordkeeping and reporting burden imposed by RCRA on the states, the public, and the regulated community to meet the federal government-wide goal established by the Paperwork Reduction Act (PRA) (67 FR 2518). The PRA

establishes a federal government-wide goal of reducing burden 40 percent from the total burden imposed annually on September 30, 1995. If finalized, the Burden Reduction Initiative will reduce the reporting requirements for generators and TSDFs by eliminating or modifying non-essential paperwork.

EPA proposes to reduce the self-inspection frequency for hazardous waste tanks from daily to weekly and to eliminate the RCRA overlap with Occupational Safety and Health Administration (OSHA) training requirements. Additionally, EPA proposes to change the land disposal restrictions (LDR) paperwork requirements by eliminating the need for generators to conduct the waste determination required in §268.7(a)(1) and eliminating the need for treatment and recycling facilities to send notifications and certifications required in §268.7(b)(6) to EPA, provided the information is kept in facility records.

### **4.3 HAZARDOUS WASTE GENERATOR PROGRAM EVALUATION**

On April 22, 2004, EPA published an advanced notice of proposed rulemaking (ANPRM) seeking information from stakeholders to evaluate the effectiveness of the RCRA hazardous waste generator regulatory program and identify areas for potential improvement (69 FR 21800). EPA, along with the states, will use the information to determine whether changes to the hazardous waste generator program are appropriate. If changes are necessary, EPA will develop and implement a strategy to improve program effectiveness, foster a pollution prevention stewardship philosophy, and reduce compliance cost where practicable. As part of this effort, EPA held a series of public meetings in the spring of 2004 to discuss possible changes to the hazardous waste generator program.

### **4.4 PERFORMANCE TRACK LARGE QUANTITY GENERATORS**

On April 22, 2004, EPA published the National Environmental Performance Track Program final rule (69 FR 21737). This rule allows large quantity generators (LQGs) who are members of Performance Track to accumulate hazardous waste on site for up to 180 days, or up to 270 days in certain cases, without obtaining a RCRA permit or interim status (§262.34(j)). In order to qualify for the extended accumulation time, the generator must meet the requirements in §262.34(j), including but not limited to the following :

- notify EPA or the authorized state of their intent to store waste in excess of 90 days
- provide secondary containment for containers accumulating waste
- accumulate no more than 30,000 kg of hazardous waste at any one time
- submit an Annual Performance Report.

## 5. GENERATOR SUMMARY CHART

	<b>CESQG</b>	<b>SQG</b>	<b>LQG</b>
<b>Quantity Limits</b>	≤ ≤100 kg/month ≤ ≤ 1 kg/month of acute hazardous waste ≤ ≤ 100 kg/month of acute spill residue or soil §§261.5(a) and (e)	between 100-1,000 kg/month §262.34(d)	≥1000 kg/month > 1 kg/month of acute hazardous waste > 100 kg/month of acute spill residue or soil Part 262 and §261.5(e)
<b>EPA ID Number</b>	Not required §261.5	Required §262.12	Required §262.12
<b>On-Site Accumulation Quantity</b>	≤ ≤ 1,000 kg ≤ ≤ 1 kg acute ≤ ≤ 100 kg acute spill residue §§261.5(f)(2) and (g)(2)	≤ 6000 kg §262.34(d)(1)	No Limit
<b>Accumulation Time Limits</b>	None §261.5	≤ 180 days or ≤ 270 days (if > 200 miles) §§262.34(d) and (e)	≤ 90 days §262.34(a)
<b>Storage Requirements</b>	None §261.5	Basic requirements with technical standards for tanks or containers §§262.34(d)(2) and (3)	Full compliance for management of tanks, containers, drip pads, or containment buildings §262.34(a)
<b>Off-site Management of Waste</b>	State approved or RCRA permitted/interim status facility §§261.5(f)(3) and (g)(3)	RCRA permitted/interim status facility §262.20(b)	RCRA permitted/interim status facility §262.20(b)
<b>Manifest</b>	Not required §261.5	Required §262.20	Required §262.20
<b>Biennial Report</b>	Not required §261.5	Not required §262.44	Required §262.41
<b>Personnel Training</b>	Not required §261.5	Basic training required §262.34(d)(5)(iii)	Required §262.34(a)(4)
<b>Contingency Plan</b>	Not required 261.5	Basic plan §262.34(d)(5)(i)	Full plan required §262.34(a)(4)
<b>Emergency Procedures</b>	Not required §261.5	Required §262.34(d)(5)(iv)	Required §262.34(a)(4)
<b>DOT Transport Requirements</b>	Yes (if required by DOT)	Yes §§262.30-262.33	Yes §§262.30-262.33