
Biennial Report: Reportable and Non-Reportable Wastes

***** NOTE *****

Click on any of the links below for quick access to specific sections of the document.

Whether a waste should be part of the Biennial Report: [Generators](#) (flowchart); [Treatment, storage, and disposal facility \(TSDF\)](#) (flowchart); [Executive Summary](#) (7 pages with bullets and flowcharts); ["Biennial Report: Reportable and Non-Reportable Wastes"](#) (entire document).

**Office of Resource Conservation and Recovery
U.S. Environmental Protection Agency**

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EXECUTIVE SUMMARY

(Go to [Cover Page](#) / Go to [Table of Contents](#) /
Go to [EPA's Web page on National Biennial RCRA Hazardous Waste Report](#))

The U.S. Environmental Protection Agency's (EPA's) and its State Partners' mission to protect human health and the environment includes the responsibility to effectively manage the nation's hazardous waste. As part of this task, EPA and the States collect and maintain information about the generation, management, and final disposition of the nation's hazardous waste regulated by the Resource Conservation and Recovery Act (RCRA), as amended. This information is collected in the Hazardous Waste Report, which is also known as the Biennial Report.

EPA's Office of Resource Conservation and Recovery (ORCR; formerly Office of Solid Waste or OSW) and the Waste Activity Group (composed of representatives from States, one EPA Region, and EPA Headquarters) prepared "Biennial Report: Reportable and Non-Reportable Wastes" ("the BR Document") as a reference for hazardous waste handlers and the RCRAInfo¹ Community in:

1. [Determining whether a waste should be part of the Biennial Report](#); and
2. [Determining whether a hazardous wastewater should be part of the Biennial Report](#).

*The purpose of this BR Document is to clarify and provide further details on the current Biennial Report Instructions, not to change the Biennial Report Instructions. The BR Document does not replace Federal laws or regulations. It simply compiles and summarizes information on the regulations and the associated regulatory citations in the Code of Federal Regulations (CFR) pertaining to the completion of the Biennial Report. In addition, **please note that States have regulations** which may be more stringent and/or broader in scope than the Federal regulations.*

*Follow any of the **links (hyperlinks)** in the document to obtain additional information on the corresponding topic. Links are in [underlined blue text](#). To follow a link, move the cursor to the desired topic and left click on the computer mouse.*

Part 1 Executive Summary: Determining Whether a Waste Should be Part of the Biennial Report

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSD Flowchart) / Go to [Table of Contents](#))

EPA uses the information collected in the Biennial Report to, among other things:

- Provide the EPA and the States with an understanding of hazardous waste generation and management in the U.S.

¹ RCRAInfo, or the Resource Conservation and Recovery Act Information system, is a national database used by EPA to track entities regulated under Subtitle C of RCRA (i.e., hazardous waste handlers). RCRAInfo includes data on general handler information, waste generation and management, permit or closure status, compliance with Federal and State regulations, and cleanup activities.

- Help EPA measure the quality of the environment, such as monitoring industry compliance with the regulations and evaluating waste minimization efforts taken by industry.
- Communicate to the public, primarily through publication of the National Biennial RCRA Hazardous Waste Report.

Therefore, determining whether a waste should be part of the Biennial Report is a process that might have a significant impact on the accuracy of national waste generation and management estimates, and eventually affect decision-making for regulatory or program purposes.

General Principles

Exhibit ES-1 presents the general principles or analytical framework for determining whether a waste should be part of the Biennial Report, as it pertains to generators. The exhibit indicates whether the material should be counted toward generator status determination and whether the material should be part of the Biennial Report.

Exhibit ES-1
Analytical Framework for Determining Whether a
Generator's Waste Should be Part of the Biennial Report

If a material . . .	Should it count toward generator status determination?	Should it be part of the Biennial report?
Is not a solid waste	No	No
Is a solid waste, but not a hazardous waste	No	No
Is a hazardous waste, but exempt from counting and reporting requirements	No	No
Is a hazardous waste, and is not exempt from counting or reporting requirements	Yes	Yes, unless the site does not meet the definition of LQG (i.e., the site meets the definition of SQG or CESQG)

LQG – Large quantity generator.

SQG – Small quantity generator.

CESQG – Conditionally-exempt small quantity generator.

In general terms, a material should be reported in the Biennial Report if that material is a hazardous waste that: (1) counts towards a generator's regulatory status; (2) the hazardous waste is not exempt from reporting; and (3) the regulatory status of the generator is a large quantity generator (e.g., 1,000 kilograms or greater of hazardous waste, or greater than 1 kilogram of acute hazardous waste listed in 40 CFR 261.31 or 40 CFR 261.33(e) in **at least one calendar month**.²

- [Large quantity generators \(LQGs\)](#) are subject to the Biennial Report under 40 CFR 262.41.^{3, 4}
- **Treatment, Storage, and Disposal Facilities (TSDFs)** are subject to the Biennial Report under 40 CFR 264.75 or 265.75.^{5, 6} Hazardous wastes should be part of the Biennial Report if they are:
 - Generated and accumulated onsite at the TSDF.
 - Treated, stored, disposed of, or recycled onsite at the TSDF. This includes all hazardous wastes received from offsite.

Identifying Hazardous Wastes that Should be Part of the Biennial Report

To determine whether a waste should be part of the Biennial Report, it is best to ask a series of questions in a step-wise manner. These steps are summarized in [Exhibit ES-2](#) for generators and in [Exhibit ES-3](#) for TSDFs.

Follow any of the **exhibits' links** to obtain additional information on the corresponding topic. To follow a link, move the cursor to the desired topic and left click on the computer mouse.

² For additional information on RCRA Biennial Report requirements for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions, refer to [Appendix F](#) of this document.

³ 40 CFR Part 262 – Standards Applicable to Generators of Hazardous Waste.

⁴ Please consult your State's regulations which may be more stringent and/or broader in scope.

⁵ 40 CFR Part 264 – Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

⁶ 40 CFR Part 265 – Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

Exhibit ES-2

Determination Flowchart for Generators

“Should the Waste be Part of the Biennial Report?”

(Go to [Cover Page](#) / Go to [EPA's Web page on "National Biennial RCRA Hazardous Waste Report"](#))

[Large quantity generators \(LQGs\)](#) are required to complete and file the Biennial Report or the State's equivalent hazardous waste report. In determining whether a site qualifies as a LQG, a site must first identify all hazardous wastes generated at the site that count toward generator status determination. The flowchart below is designed as a tool for identifying hazardous wastes generated at the site that should be part of the Biennial Report. Click on any of the flowchart's links to obtain additional information on the corresponding topic.

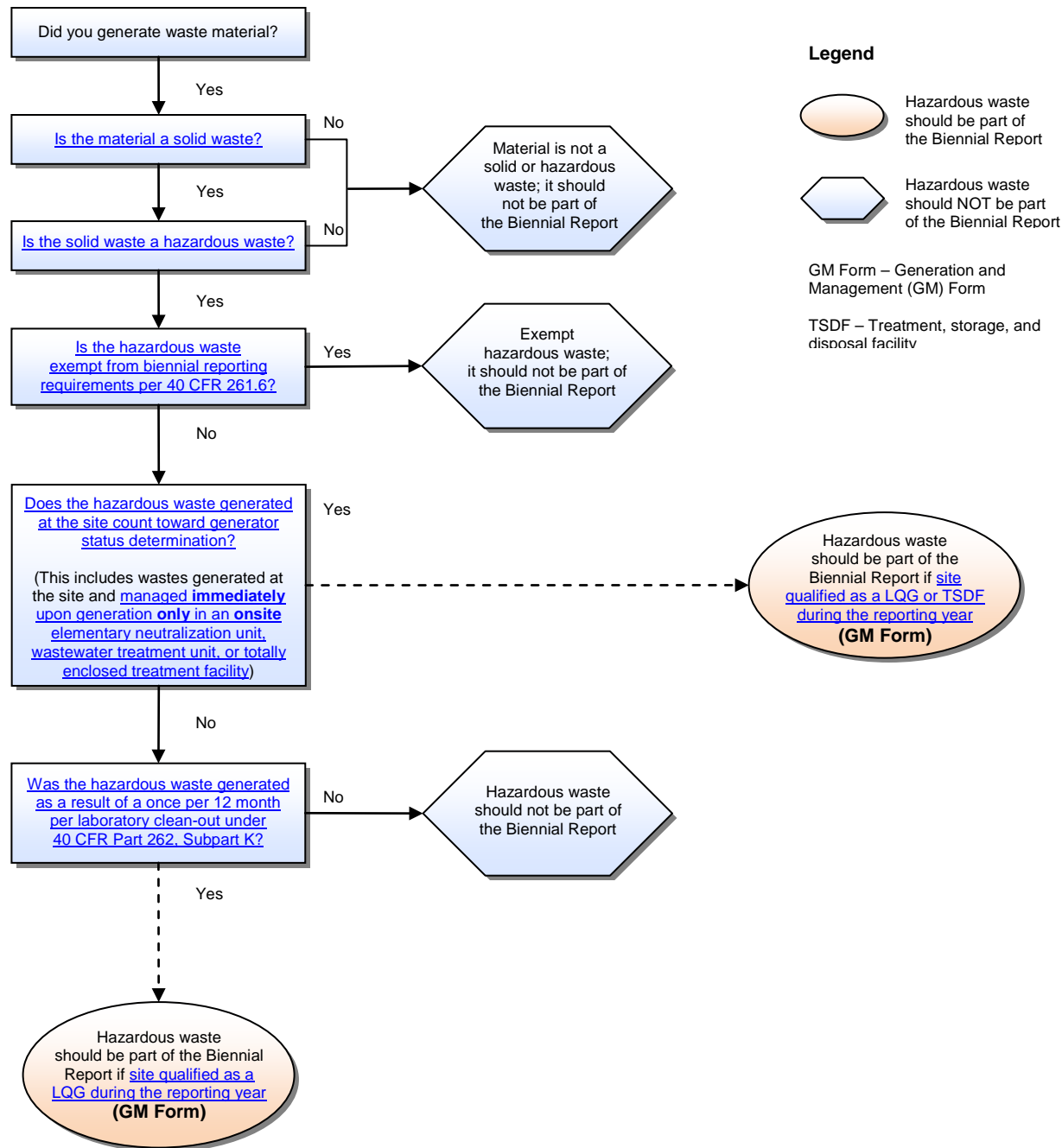


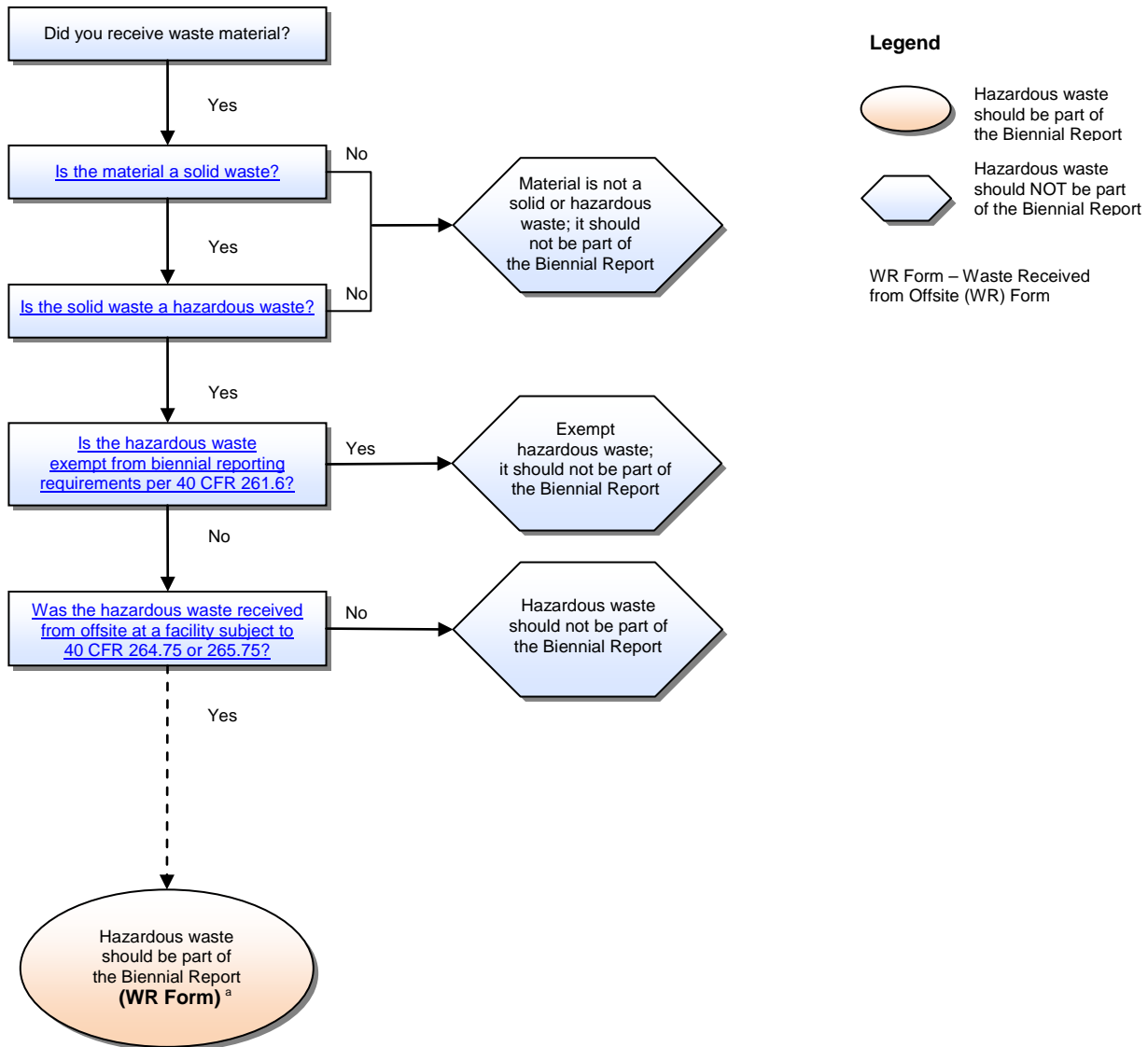
Exhibit ES-3

Determination Flowchart for Treatment, Storage, and Disposal Facilities

“Should the Waste be Part of the Biennial Report?”

(Go to [Cover Page](#) / Go to [EPA's Web page on "National Biennial RCRA Hazardous Waste Report"](#))

[Treatment, storage, and disposal facilities \(TSDFs\)](#) are required to complete and file the Biennial Report or the State's equivalent hazardous waste report. In completing the Biennial Report, [TSDFs](#) must report all hazardous wastes received from offsite for management. The flowchart below is designed as a tool for identifying hazardous wastes that should be part of the Biennial Report. Follow any of the exhibit's links to obtain additional information on the corresponding topic. To follow a link, move the cursor to the desired topic and left click on the computer mouse.



^a All hazardous wastes received from offsite at a facility subject to 40 CFR 264.75 or 265.75 must be part of the Biennial Report.

Part 2 Executive Summary: Determining Whether a Hazardous Wastewater Should be Part of the Biennial Report

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSD Flowchart) / Go to [Table of Contents](#))

Most hazardous wastes generated take the form of wastewaters (approximately 85-90%). In addition, volumes of wastewaters generated by some facilities can be in the tens of millions of tons. Therefore, counting or not counting correctly wastewaters can significantly impact the accuracy of national waste generation estimates, and eventually affect decision-making for regulatory or program purposes.

General Principles

Applying the following general principles can help simplify the process of determining which hazardous wastewaters should be part of the Biennial Report:

- Find out how the waste is being managed:
 - Was it a hazardous waste that was shipped offsite? If yes, it is reportable no matter what the form code⁷ is.
 - If the hazardous waste was managed onsite, was the management method code⁸ one that might indicate wastewater treatment or neutralization? If yes, find out more about how the waste was managed so you can determine if it should be part of the Biennial Report.
- **Not counted toward generator status determination = not to be reported.**
- **Do not count** hazardous wastewaters managed **immediately** upon generation **only** in **onsite elementary neutralization units**, **wastewater treatment units (WWTUs)**, or **totally enclosed treatment facilities**.
- **Do not count and report** the hazardous waste, if managed in an onsite WWTU as follows:
 - If the device managing the waste meets the [definition of a WWTU](#). A tank or tank system used to store or treat the waste as part of a wastewater treatment facility that is subject to regulation under the Clean Water Act (CWA) is covered by the [WWTU exemption](#).
 - The WWTU does not have to be physically connected to the tank; the waste can be hauled onsite by truck.
 - Waste sent offsite in pipes for treatment in a WWTU is not reportable, if it is traveling through the pipe immediately after generation.

⁷ Form codes describe the general physical or chemical characteristics of a hazardous waste. Form codes are provided in the Biennial Report instructions, and must be used in completing the Biennial Report.

⁸ Management method codes describe the type of hazardous waste management system used to treat or dispose of a hazardous waste. Management method codes are provided in the Biennial Report instructions, and must be used in completing the Biennial Report.

- **Count and report** a hazardous wastewater:
 - If it was managed either onsite or offsite in a permitted underground injection control well for hazardous waste.
 - If it was transported **offsite** to a publicly owned treatment works (POTW) via truck.
 - If it is not managed immediately upon generation in an exempt unit, the site must report the generation and management of the waste, e.g., for a LQG with greater than 90-day storage with subsequent wastewater treatment, its waste is reportable.
 - If it is stored onsite in a surface impoundment prior to discharge, it is reportable.
 - If it was accumulated in drums prior to being placed in the WWTU, it is reportable because it counts toward generator status determination.

Recommendations for Identifying Hazardous Wastewaters Managed Onsite

The following steps may be taken to identify hazardous wastewaters:

- Based on data reported in Generation and Management (GM) Forms of the Biennial Report, develop a list of waste streams managed onsite that are represented by management method codes:
 - H070 (chemical treatment - reduction/destruction/oxidation/precipitation)⁹;
 - H081 (biological treatment);
 - H100 (physical treatment only), with special interest on waste streams managed through adsorption or air/stream stripping¹⁰;
 - H121 (neutralization only); and
 - H135 (discharge to sewer/POTW or National Pollutant Discharge Elimination System (NPDES)).
- Conduct research on these waste streams, if relevant, by:
 - Obtaining and reviewing process information; and
 - Finding how the waste is managed after generation.
- Compare information compiled through research to the relevant regulations.
- Find out if the waste is managed in such a way that exempts it from reporting – whether the hazardous waste is managed immediately upon generation in an onsite elementary neutralization unit, WWTU, or totally enclosed treatment facility.

⁹ For reporting year 2013, previous codes H071 (chemical reduction), H073 (cyanide destruction), H075 (chemical oxidation), H076 (wet air oxidation) and H077 (other chemical precipitation) were all consolidated under the new management method code H070.

¹⁰ For reporting year 2013, previous H082 (adsorption), H083 (air or steam stripping), H101 (sludge treatment and/or dewatering), H103 (absorption), H123 (settling or clarification), and H124 (phase separation) were all consolidated under the new management method code H100. Of special interest for purposes of identifying hazardous wastewaters are waste streams managed onsite through adsorption or air/stream stripping (i.e., previous management method codes H082 or H083).

PART 1: DETERMINING WHETHER A WASTE SHOULD BE PART OF THE BIENNIAL REPORT

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSDF Flowchart) / Go to [Table of Contents](#))

The U.S. Environmental Protection Agency (EPA) uses the information collected in the Biennial Report to, among other things:

- Provide the EPA and the States with an understanding of hazardous waste generation and management in the U.S.
- Help EPA measure the quality of the environment, such as monitoring industry compliance with the regulations and evaluating waste minimization efforts taken by industry.
- Communicate to the public, primarily through publication of the National Biennial RCRA Hazardous Waste Report.

Therefore, determining whether a waste should be part of the Biennial Report is a process that might have a significant impact on the accuracy of national waste generation and management estimates, and eventually affect decision-making for regulatory or program purposes.

This section of the document provides information to help determine whether a waste should be part of the Biennial Report. In doing so, this section provides answers to the following questions:

- [Is the material a solid waste?](#)
- [Is the solid waste a hazardous waste?](#)
- [Is the hazardous waste exempt from biennial reporting requirements per 40 CFR 261.6?](#)
- [Does the hazardous waste generated at the site count toward generator status determination?](#)

- [Was the Hazardous Waste Generated as a Result of a Once per 12 Month per Laboratory Clean-Out under 40 CFR Part 262, Subpart K?](#)
- [Did the site qualify as a large quantity generator \(LQG\) or treatment, storage, and disposal facility \(TSDF\) during the reporting year \(GM Form\)?](#)
- [Was the hazardous waste received from offsite at a facility subject to 40 CFR 264.75 or 265.75 \(WR Form\)?](#)

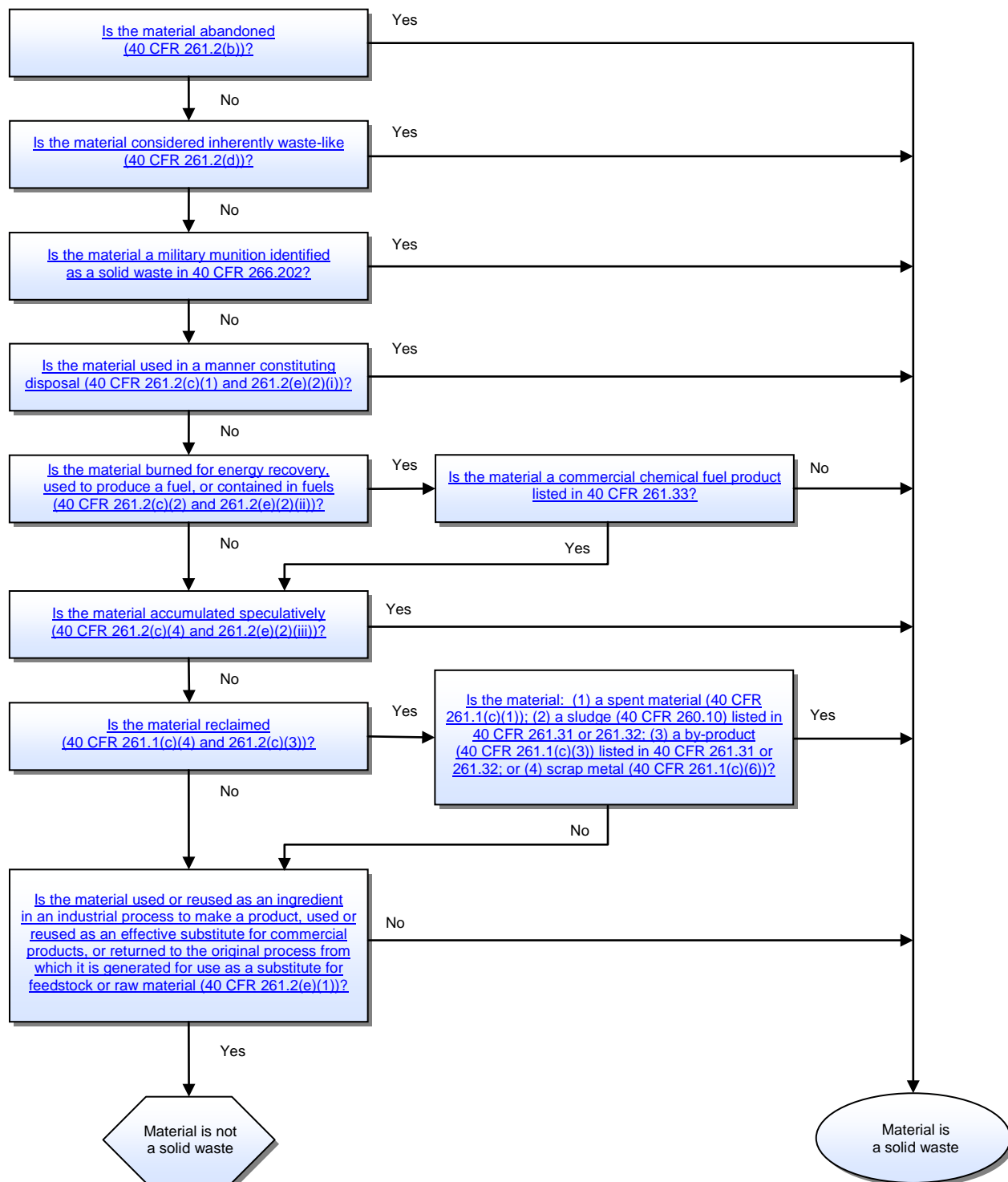
Is the Material a Solid Waste?

(Go to [Exhibit ES-2](#) (Generator Flowchart)/
Go to [Exhibit ES-3](#) (TSDF Flowchart))

The statutory definition of a solid waste is not based on the physical form of the material, but rather that the material is a waste. 40 CFR 261.2 identifies solid wastes as any [discarded material](#) that is not excluded from the definition of solid waste.

To determine whether a material is a solid waste, it is best to ask a series of questions in a step-wise manner. These steps are summarized in [Exhibit 1-1](#), and discussed in the remainder of this section.

Exhibit 1-1
Determination Flowchart
"Is the Material a Solid Waste?"



What is a Discarded Material?

A “discarded material” is any of the following:

- **Abandoned Material.** A material is abandoned if it is: (1) disposed of; (2) burned or incinerated; or (3) accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated. (40 CFR 261.2(b))
- **Inherently Waste-Like Material.** Some materials are considered inherently waste-like because they pose significant threats to human health and the environment if released or mismanaged. As a result, the Resource Conservation and Recovery Act (RCRA), as amended, does not exempt such wastes from the definition of solid waste even if they are recycled through direct use or reuse without prior reclamation. (40 CFR 261.2(d))
- **Military Munition.** Military munitions are all ammunition products and components produced for or used by the U.S. Department of Defense (DOD) or U.S. Armed Services for national defense and security. Pursuant to 40 CFR 266.202, unused military munitions are solid wastes when abandoned or removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, incinerated, or treated prior to disposal; rendered non-recyclable or non-useable through deterioration; or declared a waste by an authorized military official. Used (i.e., fired or detonated) munitions may also be solid wastes if collected for storage, reclamation, treatment, or disposal.
- **Recycled Material.** A material is recycled if it is used or reused (e.g., as an ingredient in a process), reclaimed, or used in certain ways (e.g., burned for energy recovery). Note, however, that whether a particular

recycled material is a solid waste depends on the manner in which it is recycled. The regulations at 40 CFR 261.2 include provisions for determining whether a recycled material is a solid waste and, therefore, potentially regulated as a hazardous waste.

Note, however, that certain materials are not considered “discarded materials;” these materials are listed at 40 CFR 261.2(a)(2)(ii).

Which Recycled Materials Are Solid Wastes?

Materials are solid wastes if they are recycled as specified below:

- **Used in a Manner Constituting Disposal.** A material is applied to or placed on the land, or used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land. (40 CFR 261.2(c)(1) and 261.2(e)(2)(i))
- **Burned for Energy Recovery, Used to Produce a Fuel, or Contained in Fuels.** Burning a material as a fuel (e.g., burning to recover energy) or using a material to produce a fuel. Note, however, that commercial chemical products listed in 40 CFR 261.33 are not solid wastes if they are themselves fuels. (40 CFR 261.2(c)(2) and 261.2(e)(2)(ii))
- **Accumulated Speculatively.** Materials accumulated speculatively or stored for extended periods of time in anticipation of recycling in the future. (40 CFR 261.2(c)(4) and 261.2(e)(2)(iii))
- **Reclaimed.** Materials processed to recover a usable product, or regenerated. (40 CFR 261.1(c)(4) and 261.2(c)(3))

Exhibit 1-2 indicates which types of secondary materials are solid wastes when recycled in each of the ways previously discussed (e.g., used in a manner constituting disposal, reclaimed). Types of secondary materials include:

- **Spent Material.** A “spent material” is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing. (40 CFR 261.1(c)(1))
- **Sludge.** “Sludge” means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant. (40 CFR 261.1(c)(2) and 40 CFR 260.10)
- **By-Product.** A “by-product” is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process. (40 CFR 261.1(c)(3))
- **Scrap Metal.** “Scrap metal” is bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled. (40 CFR 261.1(c)(6))

Exhibit 1-2
Regulatory Status of Secondary Materials

Secondary Material	Used in a Manner Constituting Disposal	Energy Recovery/ Fuel	Reclaimed	Accumulated Speculatively
Spent Materials	Solid Waste	Solid Waste	Solid Waste	Solid Waste
Sludges listed in 40 CFR Part 261.31 or 261.32	Solid Waste	Solid Waste	Solid Waste	Solid Waste
Sludges exhibiting a characteristic of hazardous waste	Solid Waste	Solid Waste	<i>Not a Solid Waste</i>	Solid Waste
By-products listed in 40 CFR 261.31 or 261.32	Solid Waste	Solid Waste	Solid Waste	Solid Waste
By-products exhibiting a characteristic of hazardous waste	Solid Waste	Solid Waste	<i>Not a Solid Waste</i>	Solid Waste
Commercial chemical products listed in 40 CFR 261.33	Solid Waste	Solid Waste	<i>Not a Solid Waste</i>	<i>Not a Solid Waste</i>
Scrap metal other than excluded scrap metal (see 40 CFR 261.1(c)(9) for definition of “excluded scrap metal”)	Solid Waste	Solid Waste	Solid Waste	Solid Waste

Source: 40 CFR 261.2.

Which Recycled Materials Are Not Solid Wastes?

Materials are **NOT solid wastes** if they recycled as specified below:

- **Used or Reused as Ingredients.** Materials used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed. (40 CFR 261.2(e)(1)(i))
- **Used or Reused as Effective Substitutes.** Materials used or reused as effective substitutes for commercial products. (40 CFR 261.2(e)(1)(ii))
- **Returned Directly to the Original Process.** Materials returned to the original process from which they are generated (without first being reclaimed or land disposed) for use as a substitute for feedstock or raw material. (40 CFR 261.2(e)(1)(iii))

Which Materials are Excluded from the Definition of SOLID Waste?

Congress and EPA have excluded certain specific materials from the definition of solid waste, thereby excluding them from hazardous waste regulations.

There are 25 exclusions from the definition of solid waste, provided certain conditions are met. These exclusions are listed at 40 CFR 261.4(a)(1)-(25). Examples of exclusions from the definition of solid waste include:

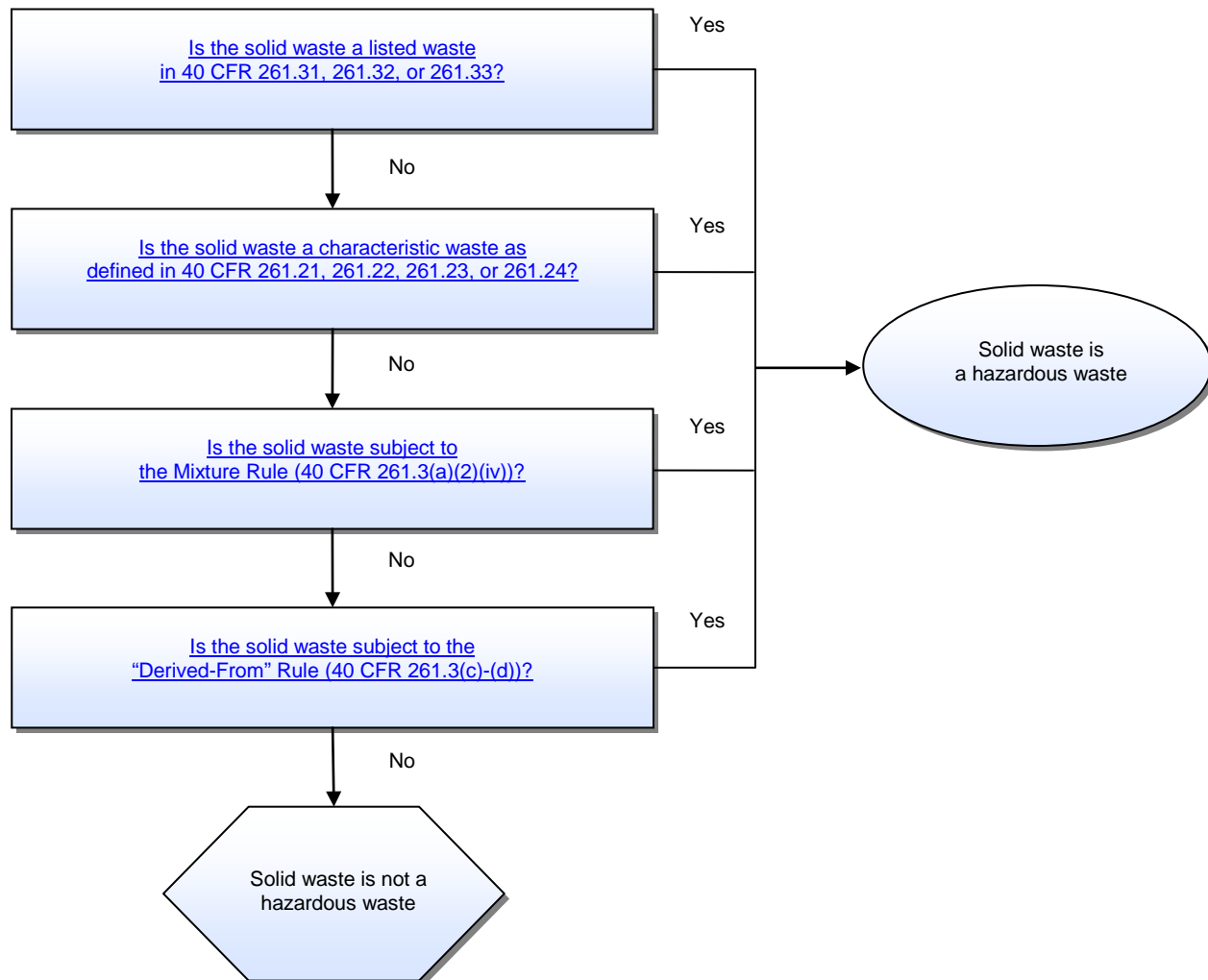
- Domestic sewage;
- Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended;
- Pulping liquors;
- Spent wood preservatives;
- Coke by-product wastes;
- Excluded scrap metal being recycled;
- Comparable fuels;
- Mineral processing spent materials;
- Spent caustic solutions from petroleum refining; and
- Recycling of cathode ray tubes (CRTs).

Is the Solid Waste a Hazardous Waste?

(Go to [Exhibit ES-2](#) (Generator Flowchart)/
Go to [Exhibit ES-3](#) (TSDF Flowchart))

In determining whether a solid waste is a hazardous waste, it is best to ask a series of questions in a step-wise manner. These steps are summarized in [Exhibit 1-3](#), and discussed in the remainder of this section.

Exhibit 1-3
Determination Flowchart
"Is the Solid Waste a Hazardous Waste?"



Is the Solid Waste a Listed Waste?

"Listed waste" refers to waste that EPA has identified as hazardous as a result of its investigation of particular industries or because EPA has specifically recognized a commercial chemical waste's toxicity. A solid waste is a listed hazardous waste if it is named on one of the following lists:

- **F-list.** This list, at 40 CFR 261.31, includes wastes from certain common manufacturing and industrial processes. Because they are not specific to one type of industry, they are called wastes from non-specific sources.
- **K-list.** This list, at 40 CFR 261.32, includes wastes from specific manufacturing or industrial processes.
- **P-list and U-list.** These two lists, at 40 CFR 261.33, designate certain commercial chemical products as hazardous when disposed of unused. The primary difference between P-listed and U-listed wastes is that, when discarded, P-listed wastes are considered "acutely hazardous," while U-listed wastes are considered "hazardous." Thus, U-listed wastes are regulated in a somewhat less stringent manner than P-listed wastes.

Is the Solid Waste a Characteristic Waste?

A "characteristic waste" is any solid waste that exhibits one or more of the following characteristics: ignitability, corrosivity, reactivity, or toxicity. Additional information about each of the above characteristics may be reviewed at 40 CFR 261.21 through 261.24.

Is the Solid Waste Subject to the Mixture Rule?

The "Mixture Rule" states that mixtures of solid waste and listed hazardous waste must be regulated as hazardous waste. There are two ways to determine if a material is regulated under the mixture rule:

- If the material is a mixture of a solid waste and a hazardous waste, and the mixture exhibits one or more of the characteristics of hazardous waste; or
- If the material is a mixture of a solid waste and a listed waste.

Additional information on the Mixture Rule may be reviewed at 40 CFR 261.3(a)(2)(iv).

Is the Solid Waste Subject to the "Derived-From" Rule?

Hazardous waste treatment, storage, and disposal processes often generate residues that may contain high concentrations of hazardous constituents. The "Derived-From" Rule governs the regulatory status of such waste residues. According to the "Derived-From" Rule, any solid waste derived from the treatment, storage, or disposal of a hazardous waste is considered hazardous. This principle applies regardless of the actual risk to human health or the environment. Additional information on the "Derived-From" Rule and exemptions to the rule are included in 40 CFR 261.3(c)-(d).

Which Materials are Excluded from the Definition of HAZARDOUS Waste?

EPA also excludes certain solid wastes from the definition of hazardous waste, thereby excluding them from hazardous waste regulations.

There are 17 exclusions from the definition of hazardous waste, provided certain conditions are met. These exclusions are listed at 40 CFR 261.4(b)(1)-(15), 261.4(b)(17), and 261.4(g).¹¹ Examples of exclusions from the definition of hazardous waste include:

- Household hazardous waste
- Agricultural waste
- Oil, gas, and geothermal wastes
- Mining and mineral processing wastes
- Cement kiln dust
- Arsenically treated wood
- Injected groundwater
- Spent chlorofluorocarbon refrigerants
- Used oil filters

¹¹ 40 CFR 261.4(b)(16) is "reserved." Thus, there is no exclusion at this regulatory citation.

Is the Hazardous Waste Exempt from Biennial Reporting Requirements per 40 CFR 261.6?

(Go to [Exhibit ES-2](#) (Generator Flowchart)/
Go to [Exhibit ES-3](#) (TSDF Flowchart))

Under 40 CFR 261.6, certain hazardous wastes that are recycled, known as “recyclable materials,” are exempt from certain hazardous waste regulatory requirements, including counting and reporting requirements. Examples include: industrial ethyl alcohol that is reclaimed, unless provided otherwise in an international agreement as specified in 40 CFR 262.58; and scrap metal that is not excluded under 40 CFR 261.4(a)(13).

Does the Hazardous Waste Generated at the Site Count toward Generator Status Determination?

(Go to [Exhibit ES-2](#) (Generator Flowchart))

Generator Status Determination

After determining which wastes are hazardous, **each month**, generators are responsible for totaling (or counting) the weight of all hazardous wastes generated in that month in order to determine if they will be regulated as a conditionally exempt small quantity generator (CESQG), a small quantity generator (SQG), or a large quantity generator (LQG) for that particular month.

The regulations stating which hazardous wastes are counted in a generator's monthly quantity determination are found in 40 CFR 261.5(c) and (d).

Do Not Count the Following Wastes in Determining Generator Status

Pursuant to 40 CFR 261.5(c), **a generator must include (count) all hazardous waste that it generates, except hazardous waste that:**¹²

- Is exempt from regulation under 40 CFR 261.4(c)-(f), 261.6(a)(3), 261.7(a)(1), or 261.8. (40 CFR 261.5(c)(1))
- Is managed immediately upon generation only in onsite elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10. (40 CFR 261.5(c)(2))
- Is recycled, without prior storage or accumulation, only in an onsite process subject to regulation under 40 CFR 261.6(c)(2). (40 CFR 261.5(c)(3))
- Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR Part 279. (40 CFR 261.5(c)(4))
- Is spent lead-acid batteries managed under the requirements of 40 CFR Part 266, Subpart G. (40 CFR 261.5(c)(5))
- Is universal waste managed under 40 CFR 261.9 and 40 CFR Part 273. (40 CFR 261.5(c)(6))
- Is a hazardous waste that is an unused commercial chemical product (listed in 40 CFR Part 261, Subpart D or exhibiting one or more characteristics in 40 CFR Part 261, Subpart C) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to 40 CFR 262.213. (40 CFR 261.5(c)(7))

Avoid Double Counting

All of the following wastes have already been counted when they were initially generated. Thus, to avoid double counting, 40 CFR 261.5(d) states that the following types of waste **do not need to be counted** when determining generator classification:

¹² Note, however, that all hazardous wastes received from offsite at a facility subject to 40 CFR 264.75 or 265.75 must be part of the Biennial Report.

- Hazardous waste when it is removed from onsite storage. (40 CFR 261.5(d)(1))
- Hazardous waste produced by onsite treatment (including reclamation) of hazardous waste, so long as the hazardous waste that is treated was counted once. (40 CFR 261.5(d)(2))
- Spent materials that are generated, reclaimed, and subsequently reused onsite, so long as such spent materials have been counted once. (40 CFR 261.5(d)(3))

Groundwater Contaminated by Hazardous Wastes

In determining whether contaminated groundwater should count toward generator status determination, the key is to ascertain if a contaminated groundwater has been generated and/or actively managed as a hazardous waste. Because regulations associated with contaminated groundwater vary among States, EPA Regions or Authorized States should make a determination on whether contaminated groundwater should be counted or reported in the Biennial Report. For additional information on whether contaminated groundwater should be counted toward generator status determination, refer to [Appendix A](#) of this document.

Was the Hazardous Waste Generated as a Result of a Once per 12 Month per Laboratory Clean-Out under 40 CFR Part 262, Subpart K?

(Go to [Exhibit ES-2](#) (Generator Flowchart))

Under 40 CFR Part 262, Subpart K regulations (i.e., the Academic Laboratory Rule), eligible academic entities are allowed to conduct laboratory clean-outs once per 12-month period per laboratory. Hazardous wastes that are unused commercial chemical products and unused characteristic hazardous wastes that are generated solely as a result of the laboratory clean-outs do not count toward generator status determination. However, if these laboratory clean-out hazardous wastes are generated at an eligible academic entity that continues to meet

the definition of LQG, the laboratory clean-out hazardous waste should be part of the Biennial Report for that facility. For additional information on the Subpart K regulations, refer to [Appendix B](#) of this document.

Did the Site Qualify as a Large Quantity Generator or Treatment, Storage, and Disposal Facility during the Reporting Year? (GM Form)

(Go to [Exhibit ES-2](#) (Generator Flowchart)/
Go to [Exhibit ES-3](#) (TSD Flowchart))

Completion of GM Form

By Federal statute, sites are required to complete and file the Biennial Report or the State's equivalent hazardous waste report, if the site:

- Met the definition of a LQG during the reporting year; AND/OR
- Treated, stored, or disposed of hazardous wastes onsite during the reporting year.

Sites must report the generated and accumulated wastes in Generation and Management (GM) Forms of the Biennial Report. For **examples** on how to complete Biennial Report forms, refer to [Appendix C](#) of this document.

Definition of LQG

A site is a LQG if the site met any of the following criteria:

- The site generated, in any single calendar month, 1,000 kilograms (kg) (2,200 pounds (lbs)) or more of RCRA non-acute hazardous waste; or
- The site generated, in any single calendar month, or accumulated at any time, more than 1 kg (2.2 lbs) of RCRA acute hazardous waste; or

- The site generated, in any single calendar month, or accumulated at any time, more than 100 kg (220 lbs) of spill cleanup material contaminated with RCRA acute hazardous waste.

Data Quality Checks and “Include in National Report” Flags

In submitting their Biennial Report GM Form data to EPA, implementers (i.e., States and EPA Regions) will conduct data quality checks on Biennial Report forms and assign a flag to each Site Identification (Site ID) and GM Form that will be used by EPA in the calculations for the National Biennial Report. The flag is referenced as “Include in National Report.” It is the responsibility of each implementer (i.e., State or EPA Region) to determine which sites and wastes should be included. For information on **data quality checks** for individual Biennial Report forms, refer to [Appendix D](#) of this document.¹³ For additional information on how to set the “Include in National Report” flags for the Site ID and GM Forms, refer to [Appendix E](#) of this document.

used.^{14, 15} Hazardous wastes received from offsite at facilities that are not subject to 40 CFR 264.75 or 265.75 do not need to be reported in WR Forms of the Biennial Report.

Data Quality Checks and “Include in National Report” Flags

In submitting their Biennial Report WR Form data to EPA, implementers (e.g., States and EPA Regions) will conduct data quality checks on Biennial Report forms and assign a flag to each Site ID and WR Form that will be used by EPA in the calculations for the National Biennial Report. The flag is referenced as “Include in National Report.” It is the responsibility of each implementer (i.e., State or EPA Region) to determine which sites and wastes should be included. For information on **data quality checks** for individual Biennial Reports, refer to [Appendix D](#) of this document. For additional information on how to set the “Include in National Report” flags for the Site ID and WR Forms, refer to [Appendix E](#) of this document.

Was the Hazardous Waste Received from Offsite at a Facility Subject to 40 CFR 264.75 or 265.75? (WR Form)

(Go to [Exhibit ES-3](#) (TSD Flowchart))

Completion of WR Form

All hazardous wastes received from offsite for treatment, storage, disposal, or recycling at facilities subject to 40 CFR 264.75 or 265.75 must be reported in Waste Received from Offsite (WR) Forms of the Biennial Report or the State’s equivalent hazardous waste report, regardless of the management method

¹³ Information in Appendix D is based on a presentation developed by Paula Canter from the Ohio Environmental Protection Agency and Jack Griffith from the Florida Department of Environmental Protection. EPA would like to acknowledge and thank both of them for their contribution to this document.

¹⁴ 40 CFR Part 264 – Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

¹⁵ 40 CFR Part 265 – Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

Additional Information Sources

- “RCRA Orientation Manual,” 2008. Available online at:
<http://www.epa.gov/waste/inforesources/pubs/orientat/index.htm>, last accessed on July 15, 2011.
- “RCRA Training Module: Introduction to Generators (40 CFR Part 262),” Publication Number EPA530-K-05-011, September 2005. Available online at:
<http://www.epa.gov/waste/inforesources/pubs/hotline/training/gen05.pdf>, last accessed on July 15, 2011.
- “RCRA, Superfund & EPCRA Call Center Training Module: Introduction to Definition of Solid Waste and Hazardous Waste Recycling (40 CFR §§261.2 and 261.9),” Publication Number EPA530-K-02-007I, October 2001. Available online at:
<http://www.epa.gov/waste/inforesources/pubs/hotline/training/defsw.pdf>, last accessed on July 15, 2011.

PART 2: DETERMINING WHETHER A HAZARDOUS WASTEWATER SHOULD BE PART OF THE BIENNIAL REPORT

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSDF Flowchart) / Go to [Table of Contents](#))

Most hazardous wastes generated take the form of wastewaters (approximately 85-90%). In addition, volumes of wastewaters generated by some facilities can be in the tens of millions of tons. Therefore, counting or not counting correctly wastewaters can significantly impact the accuracy of national waste generation estimates, and eventually affect decision-making for regulatory or program purposes.

This section of the document provides information to help determine: (1) whether a hazardous wastewater should be part of the Biennial Report and (2) whether a wastewater was managed in a unit that is eligible for the wastewater treatment unit (WWTU) exemption. In doing so, this section provides answers to the following questions:

- [Is the hazardous wastewater exempt from biennial reporting requirements?](#)
- [What regulatory citations are associated with elementary neutralization units, wastewater treatment units, and totally enclosed treatment facilities?](#)
- [What is an elementary neutralization unit?](#)
- [What is a wastewater treatment unit?](#)
- [What is a totally enclosed treatment facility?](#)
- [What is Section 402 of the Clean Water Act?](#)
- [What is Section 307\(b\) of the Clean Water Act?](#)
- [What is a tank or tank system?](#)
- [What is the wastewater treatment unit exemption?](#)

- [What is wastewater under the wastewater treatment unit exemption?](#)
- [Which units are eligible for the wastewater treatment unit exemption?](#)
- [What is the relationship between wastewater treatment facilities and the wastewater treatment unit exemption?](#)
- [Does the exemption apply to wastewater treatment units accepting wastewater generated from offsite sources?](#)
- [Does the exemption apply to facilities shipping their waste offsite to wastewater treatment facilities?](#)

Is the Hazardous Wastewater Exempt from Biennial Reporting Requirements?

Generators

One means of exemption from biennial reporting requirements is exemption from counting toward generation status determination. Under 40 CFR 261.5(c)(2), hazardous waste that is managed immediately upon generation only in onsite elementary neutralization units, WWTUs, or totally enclosed treatment facilities as defined in 40 CFR 260.10 is exempt from the counting requirement.

Treatment, Storage, and Disposal Facilities

Another means of exemption from biennial reporting requirements is exemption from permitting requirements under the Resource Conservation and Recovery Act (RCRA), as amended and/or compliance standards applicable to hazardous waste treatment, storage, and disposal facilities (TSDFs). Under

40 CFR 270.1(c)(2)(v), owners and operators of elementary neutralization units or wastewater treatment units as defined in 40 CFR 260.10 are exempt from RCRA permitting requirements. Under 40 CFR 264.1(g)(6) and 265.1(c)(10), owners and operators of elementary neutralization units or wastewater treatment units as defined in 40 CFR 260.10 are exempt from the standards applicable to hazardous waste TSDFs, as it pertains to those units.

What Regulatory Citations are Associated with Elementary Neutralization Units, Wastewater Treatment Units, and Totally Enclosed Treatment Facilities?

Generators

- 40 CFR 261.5(c)(2) states that hazardous waste that “is managed immediately upon generation only in onsite elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10” is exempt from the counting requirement.

Treatment, Storage, and Disposal Facilities

- Other regulatory citations include:
 - 40 CFR 264.1(g)(6):
 - (g) The requirements of this part do not apply to:
 - (6) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in §260.10 of this chapter...
 - 40 CFR 265.1(c)(10):
 - (c) The requirements of this part do not apply to:
 - (10) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in §260.10 of this chapter...
 - 40 CFR 270.1(c)(2)(v):¹⁶
 - (2) Specific exclusions. The following persons are among those who are not required to obtain a RCRA permit:

- (v) Owners and operators of elementary neutralization units or wastewater treatment units as defined in 40 CFR 260.10.

What is an Elementary Neutralization Unit?

Elementary neutralization units are tanks, tank systems, containers, transport vehicles, or vessels used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic or because they are listed solely for the characteristic of corrosivity. (40 CFR 260.10)

A tank, tank system, container, transport vehicle, or vessel that meets the definition of an elementary neutralization unit is exempt from permitting requirements under Subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended. (40 CFR 264.1(g)(6), 265.1(c)(10), and 270.1(c)(2)(v))

In addition, generators managing hazardous waste immediately upon generation in an onsite elementary neutralization unit are not required to count those wastes toward their monthly generator status. (40 CFR 261.5(c)(2))

What is a Wastewater Treatment Unit?

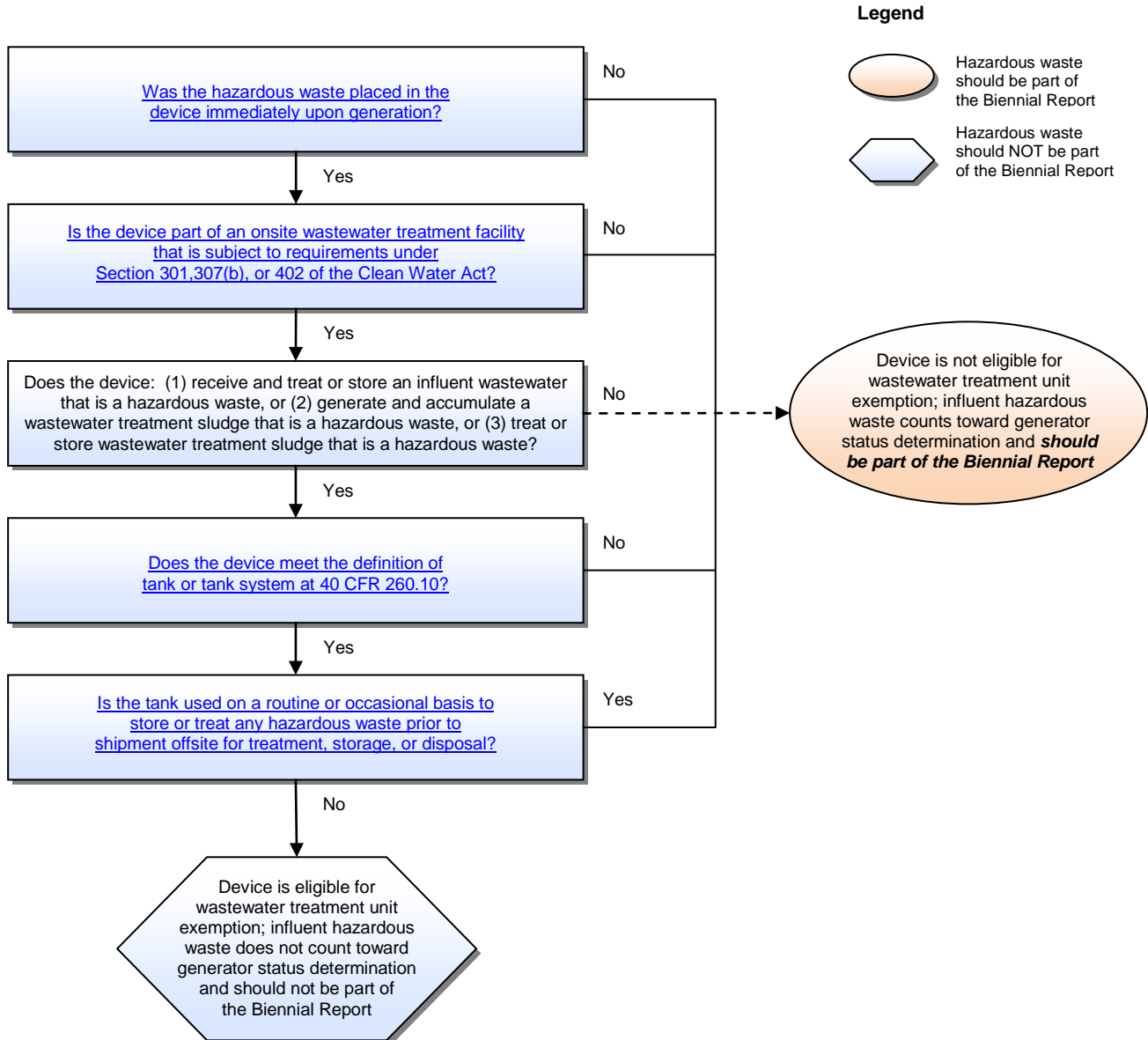
A WWTU is defined at 40 CFR 260.10 as a device which:

- Is part of a wastewater treatment facility that is subject to regulation under either Section 402 or 307(b) of the Clean Water Act (CWA); and
- Receives and treats or stores an influent wastewater that is a hazardous waste as defined in 40 CFR 261.3, or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in 40 CFR 261.3, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in 40 CFR 261.3; and
- Meets the definition of tank or tank system in 40 CFR 260.10.

¹⁶ 40 CFR Part 270 – EPA Administered Permit Programs: the Hazardous Waste Permit Program.

[Exhibit 2-1](#) illustrates the analytical framework for determining whether a waste is managed in a device eligible for the WWTU exemption.

Exhibit 2-1
Determination Flowchart for Hazardous Wastewater Reporting
“Was the Waste Managed in a Device Eligible for
the Wastewater Treatment Unit Exemption?”



What is a Totally Enclosed Treatment Facility?

A totally enclosed treatment facility is defined at 40 CFR 260.10 as a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

What is Section 402 of the Clean Water Act?

Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) Program. The NPDES Program controls direct discharges into navigable waters. Direct discharges or "point source" discharges are from sources such as pipes and sewers. NPDES permits, issued by either the U.S. Environmental Protection Agency (EPA) or an Authorized State contain industry-specific, technology-based and/or water-quality-based limits, and establish pollutant monitoring and reporting requirements. A facility that intends to discharge into the nation's waters must obtain a permit before initiating a discharge. A permit applicant must provide quantitative analytical data identifying the types of pollutants present in the facility's effluent. The permit will then set forth the conditions and effluent limitations under which a facility may make a discharge.

What is Section 307(b) of the Clean Water Act?

Section 307(b) of the CWA establishes the National Pretreatment Program. The National Pretreatment Program controls the indirect discharge of pollutants to publicly owned treatment works (POTWs) by "industrial users." Facilities regulated under Section 307(b) must meet certain pretreatment standards. The goal of the pretreatment program is to protect municipal wastewater treatment plants from damage that may occur when hazardous, toxic, or other wastes are discharged into a sewer system and to protect the quality of sludge

generated by these plants. Discharges to a POTW are regulated primarily by the POTW itself, rather than the Authorized State or EPA.

What is a Tank or Tank System?

A tank is defined, in 40 CFR 260.10, as a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

A tank system is defined, in 40 CFR 260.10, as a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

What is the Wastewater Treatment Unit Exemption?

Do Not to Count Wastes Managed in Exempt WWTU

Under 40 CFR 261.5(c)(2), a generator does not need to count hazardous waste that is managed immediately upon generation in an onsite WWTU. In addition, the WWTU exemption is an exemption from: RCRA permitting for the tank or tank system (see 40 CFR 270.1(c)(2)(v)), compliance with the standards applicable to permitted TSDFs (see 40 CFR 264.1(g)(6)), and compliance with the standards applicable to interim status TSDFs (see 40 CFR 265.1(c)(10)). The exemption is intended to cover only tanks or tank systems that are part of a wastewater treatment facility subject to the requirements of the CWA.

Applicability of WWTU Exemption

The WWTU exemption is only for the WWTU itself and does not exempt the material that is treated or managed within the unit, or any waste removed from the unit (e.g., treatment sludge removed and disposed), from being a hazardous waste. **Any waste releases or treatment residuals generated from the WWTU process (e.g., wastewater, sludge) are subject to hazardous waste determination and regulations when they leave the exempt unit. If the sludges removed from the WWTU are**

subject to regulation (e.g., placed in 90-day containers), they need to be counted.

To qualify for the WWTU exemption, a unit must meet the [definition of a WWTU](#) at 40 CFR 260.10.

What is Wastewater under the Wastewater Treatment Unit Exemption?

The term “wastewater,” in the context of the wastewater treatment unit exemption, is not defined in the hazardous waste regulations. While EPA has not promulgated a formal definition, the Agency interprets the term “wastewaters” to refer to “wastes which are substantially water with contaminants amounting to a few percent at most.”¹⁷

Note, however, that wastewater discharges from an exempt unit are regulated under the CWA. In general, most waste that is authorized to be treated in a wastewater treatment unit under a CWA wastewater permit can be managed in the exempt unit.

Which Units Are Eligible for the Wastewater Treatment Unit Exemption?

For a tank or tank system to be covered by this exemption, it must be part of an onsite WWTU. Components of the onsite WWTU are not required to be mechanically or physically connected and means of conveyance of the waste between storage and treatment does not affect the applicability of this exemption. Any onsite tank or tank system that is used to store or treat the wastewater that is ultimately managed at the onsite WWTU is considered part of the WWTU and is included under the exemption. However, if a tank or tank system, in addition to being used in conjunction with an onsite WWTU, is used on a routine or occasional basis to store or treat any hazardous waste, it is not included under this exemption.

¹⁷ August 4, 2000 Memorandum from Elizabeth A. Cotsworth, Director of EPA's Office of Solid Waste, to Samuel Coleman, P.E., Director of EPA Region VI's Compliance Assurance and Enforcement Division, RCRA Online Number 14472. Available online at: [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/E1D5FDD603C9C28C852569C900623E5B/\\$file/14472.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/E1D5FDD603C9C28C852569C900623E5B/$file/14472.pdf), last accessed on July 15, 2011.

What is the Relationship between Wastewater Treatment Facilities and the Wastewater Treatment Unit Exemption?

To be eligible for the WWTU exemption, the unit must be part of an onsite wastewater treatment facility that is subject to CWA requirements. This means that the facility must:

- Have a National Pollutant Discharge Elimination System (NPDES) permit under [Clean Water Act \(CWA\) Section 402](#);
- Be subject to an effluent guideline issued under CWA Sections 301 and 402; or
- Be subject to the pretreatment requirements of [CWA Section 307\(b\)](#).

It is not necessary that a CWA permit actually be issued for the unit in order to be eligible for the exemption.

Does the Exemption Apply to Wastewater Treatment Units Accepting Wastewater Generated From Offsite Sources?

The applicability of the WWTU exemption does not depend on whether the unit treats wastewater generated onsite or received from offsite. Thus, the exemption also applies to WWTUs accepting wastewater generated by offsite sources. Note, however, that biennial reporting is required for hazardous waste received if the receiving facility is subject to 40 CFR 264.75 or 265.75 (e.g., a permitted TSDF), but not for wastewater generated onsite and managed in an exempt WWTU.^{18, 19}

For **examples**, refer to [Appendix C](#) of this document.

¹⁸ 40 CFR Part 264 – Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

¹⁹ 40 CFR Part 265 – Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

Does the Exemption Apply to Facilities Shipping Their Waste Offsite to Wastewater Treatment Facilities?

The exemption does not apply to facilities sending wastewater offsite to a wastewater treatment facility (i.e., the offsite source); it only applies to the wastewater treatment facility. The facility sending wastewater offsite must manage that wastewater according to the applicable hazardous waste regulations.

For **examples**, refer to [Appendix C](#) of this document.

Additional Information Sources

- "What not to Report: Hazardous Waste that doesn't Count toward Generator Status," Presentation by Paula Canter, Ohio Environmental Protection Agency (OhioEPA) at the RCRAInfo National Users Conference, August 2005.
- OhioEPA's "The Wastewater Treatment Unit Exemption Under Ohio Hazardous Waste Rules," July 2004.
- "Clean Water Act (CWA)" Web Site at: <http://www.epa.gov/oecaagct/lcwa.html#National%20Pollutant>, last accessed on July 15, 2011.
- August 4, 2000 Memorandum from Elizabeth A. Cotsworth, Director of EPA's Office of Solid Waste, to Samuel Coleman, P.E., Director of EPA Region VI's Compliance Assurance and Enforcement Division, RCRA Online Number 14472. Available online at: [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/E1D5FDD603C9C28C852569C900623E5B/\\$file/14472.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/E1D5FDD603C9C28C852569C900623E5B/$file/14472.pdf), last accessed on July 15, 2011.
- January 16, 1992 Letter from Sylvia Lowrance, Director of EPA's Office of Solid Waste, to Thomas Cervino, Colonial Pipeline Company, RCRA Online Number 13526, RPPC Number 9522.1992(01). Available online at: [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/2EFBEC7739223A448525670F006C24BD/\\$file/13526.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/2EFBEC7739223A448525670F006C24BD/$file/13526.pdf), last accessed on July 15, 2011.
- March 20, 1989 Memorandum from Sylvia K. Lowrance, Director of EPA's Office of Solid Waste, to Robert H. Elliott, Jr., Zepol Corporation, RCRA Online Number 11408, RPPC Number 9471.1989(01). Available online at: [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/303F4E8F3E0E3EFB8525670F006BDDCB/\\$file/11408.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/303F4E8F3E0E3EFB8525670F006BDDCB/$file/11408.pdf), last accessed on July 15, 2011.
- December 26, 1984 Letter from John Skinner, Director of EPA's Office of Solid Waste, to James Scarbrough, Chief of EPA Region IV's Residuals Management Branch, RCRA Online Number 11050. Available online at: [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/3ADD223C140C31D58525670F006BCFEA/\\$file/11050.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/3ADD223C140C31D58525670F006BCFEA/$file/11050.pdf), last accessed on July 15, 2011.
- July 31, 1981 Letter from John P. Lehman, Director of EPA's Hazardous & Industrial Waste Division, to Richard C. Boynton, Chief of EPA's Permits Development Section, RCRA Online Number 11020. Available online at: [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/D905B03CB2BF669F8525670F006BCEE2/\\$file/11020.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/D905B03CB2BF669F8525670F006BCEE2/$file/11020.pdf), last accessed on July 15, 2011.

APPENDIX A: DETERMINING WHETHER GROUNDWATER CONTAMINATED BY HAZARDOUS WASTES SHOULD BE PART OF THE BIENNIAL REPORT

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSD Flowchart) / Go to [Table of Contents](#))

Groundwater contamination occurs when hazardous substances, including hazardous wastes, get into the groundwater and cause it to become unsafe and unfit for human use. Counting or not counting correctly groundwater contaminated by hazardous wastes (i.e., contaminated groundwater) can significantly impact the accuracy of national waste generation and management estimates, and eventually affect decision-making for regulatory or program purposes.

This appendix provides information to help determine whether contaminated groundwater should be part of the Biennial Report. In doing so, this appendix provides answers to the following questions:

- [What is groundwater?](#)
- [What is groundwater contamination?](#)
- [What is the Contained-In Policy?](#)
- [Should contaminated groundwater be part of the Biennial Report?](#)
- [Who should determine whether contaminated groundwater be part of the Biennial Report?](#)

What is Groundwater?

Groundwater is rain water or water from surface water bodies (e.g., lakes, streams) that soaks into the soil and bedrock and is stored underground in the tiny spaces between rocks and particles of soil.

What is Groundwater Contamination?

Groundwater contamination occurs when hazardous substances, including hazardous wastes, get into the groundwater and cause it to become unsafe and unfit for human use. Groundwater can become contaminated in many ways. For example, when rain water or surface water comes into contact with contaminated soil while seeping into the ground, or when liquid hazardous substances soak down through the soil or rock into the groundwater.

What is the Contained-In Policy?

The U.S. Environmental Protection Agency's (EPA's) Contained-In Policy is intended to clarify the application of hazardous waste regulations to mixtures of environmental media and hazardous waste. This policy applies to groundwater contaminated by hazardous waste (i.e., contaminated groundwater).²⁰

Contaminated groundwaters are not considered solid wastes in the sense of being abandoned, inherently waste-like, or recycled as those terms are defined in the regulations. However, contaminated groundwaters must be managed as hazardous wastes because—and only as long as—they contain listed waste(s). Note, however, that contaminated groundwaters no longer have to be managed as hazardous wastes if the hazardous waste constituents are removed by treatment.

²⁰ "Management of Remediation Waste Under RCRA," EPA530-F-98-026, October 14, 1998. RCRA Online Document No. 14291. Available online at: <http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/d9e61a0505db4b6885256817006e32b8!OpenDocument>, last accessed on July 15, 2011.

Should Contaminated Groundwater be Part of the Biennial Report?

In the Hazardous Waste Report Instructions and Form booklet [EPA Form 8700-13 A/B] (Section “Special Instructions”), EPA provides special instructions on how to report groundwater contaminated by hazardous waste:

Groundwater contaminated by RCRA hazardous waste is not considered a solid waste and is, therefore, not classified as a hazardous waste. However, because hazardous waste is “contained in” the groundwater, it must be treated “as if” it were a RCRA hazardous waste if it is removed for treatment, storage or disposal.

Applying the following general principles can help simplify the process of determining whether contaminated groundwater should be part of the Biennial Report:

- Do NOT count and report contaminated groundwater that is regulated via the [Contained-In Policy](#) (and not via the [Mixture Rule](#) or the [Derived-From Rule](#) per 40 CFR 261.3).
- Do count and report any hazardous waste constituents that are removed from the contaminated groundwater for further treatment or disposal.

Who Should Determine Whether Contaminated Groundwater Should be Part of the Biennial Report?

Because regulations associated with contaminated groundwater vary among States, EPA Regions or Authorized States should make a determination on whether contaminated groundwater should be counted or reported in the Biennial Report. In particular, EPA Regions or Authorized States should determine at what levels the groundwater no longer contains hazardous waste and make a site-specific determination on whether to count or report contaminated groundwater in the Biennial Report.²¹

In determining whether contaminated groundwater should count toward generator status determination or be part of the Biennial Report, **the key** is to ascertain if a contaminated groundwater has been generated and/or actively managed as a hazardous waste.

Following are examples of situations in which it is necessary to determine whether the contaminated groundwater should be part of the Biennial Report:

- If the contamination is due to a characteristic waste, then it is the generator’s responsibility to determine if the contaminated groundwater is a hazardous waste. EPA Regions or Authorized States need not make site-specific determination.
- If it is a situation where a facility has pumped groundwater and is claiming that the groundwater is contaminated with leachate, or “contains” leachate, EPA Regions or Authorized States should make a site-specific determination.

²¹ “Management of Remediation Waste Under RCRA,” EPA530-F-98-026, October 14, 1998. RCRA Online Document No. 14291. Available online at: <http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/d9e61a0505db4b6885256817006e32b8!OpenDocument>, last accessed on July 15, 2011.

Additional Information Sources

- “Management of Remediation Waste Under RCRA,” EPA530-F-98-026, October 14, 1998. This document contains an October 14, 1998 Memorandum from Timothy Fields, Acting Assistant Administrator of EPA's Office of Solid Waste and Emergency Response, and Steven A. Herman, Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance, to RCRA/CERCLA Senior Policy Managers and Regional Counsels. RCRA Online Document No. 14291. Available online at: <http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/d9e61a0505db4b6885256817006e32b8!OpenDocument>, last accessed on July 15, 2011.
- March 26, 1991 Letter from Sylvia K. Lowrance, Director of EPA's Office of Solid Waste, to John E. Ely, Enforcement Director of the Virginia Department of Waste Management, RCRA Online Document No. 11593. Available online at: <http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/0be97f3da1f31ecf8525670f006be551!OpenDocument>, last accessed on July 15, 2011.
- June 19, 1989 Letter from Jonathan Z. Cannon, Acting Assistant Administrator of EPA's Office of Solid Waste and Emergency Response, to Thomas C. Jorling, Commissioner of New York State Department of Environmental Conservation, RCRA Online Document No. 11434. Available online at : <http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/651f2340038dcb1e8525670f006bdec4!OpenDocument>, last accessed on July 15, 2011.

APPENDIX B:

DETERMINING WHETHER LABORATORY CLEAN-OUT HAZARDOUS WASTE UNDER THE ACADEMIC LABORATORY RULE SHOULD BE PART OF THE BIENNIAL REPORT

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSD Flowchart) / Go to [Table of Contents](#))

40 CFR Part 262, Subpart K ("Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities") is an alternative set of regulations that is specifically tailored to hazardous waste generation patterns in academic laboratories. It allows flexibility regarding where, at the eligible academic entity, the hazardous waste determination may be made, provided certain provisions are met that are designed to protect human health and the environment.

Operating under Subpart K does not remove the responsibility to complete the Biennial Report. Eligible academic entities that opt into Subpart K must complete a Biennial Report if they meet the definition of a large quantity generator (LQGs).²²

This appendix provides information to help determine whether a laboratory clean-out hazardous waste should be part of the Biennial Report. In doing so, this appendix provides answers to the following questions:

- [Who is an eligible academic entity?](#)
- [What is the definition of laboratory under Subpart K?](#)
- [What is a regularly scheduled removal of unwanted materials?](#)
- [What is the definition of laboratory clean-out under Subpart K?](#)

- [Does a regularly scheduled removal of unwanted materials qualify as a laboratory clean-out?](#)
- [Does hazardous waste generated as part of a laboratory clean-out under Subpart K count toward generator status determination?](#)
- [Do laboratory clean-outs affect who is a large quantity generator?](#)
- [What biennial reporting requirements remain the same under Subpart K?](#)
- [What biennial reporting requirements are different under Subpart K?](#)

Who is an Eligible Academic Entity?

An eligible academic entity is defined, in 40 CFR 262.200, as a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

What is the Definition of Laboratory under Subpart K?

A laboratory is defined, in 40 CFR 262.200, as an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical

²² Please consult your State's regulations which may be more stringent and/or broader in scope.

stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

What is a Regularly Scheduled Removal of Unwanted Materials?

A regularly scheduled removal of unwanted materials mostly involves the removal of routinely generated hazardous wastes from a laboratory (e.g., used chemicals generated during the course of experiments). Under 40 CFR 262.208, unwanted materials must be removed from the laboratory on a regular schedule.

To comply with this requirement, an eligible academic entity must either:

- Remove all containers of unwanted material from each laboratory on a regular interval, not to exceed 6 months; or
- Remove containers of unwanted material from each laboratory within 6 months of each container's accumulation start date.

What is the Definition of Laboratory Clean-Out under Subpart K?

Laboratory clean-out is defined, in 40 CFR 262.200, as an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (e.g., at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor/occupant. A regularly scheduled removal of unwanted material as required by 40 CFR 262.208 does not qualify as a laboratory clean-out.

Does a Regularly Scheduled Removal of Unwanted Materials Qualify as a Laboratory Clean-Out?

Under the Subpart K regulations, a regularly scheduled removal of unwanted materials is considered to be different than a laboratory

clean-out. Regularly scheduled removals mostly involve removing routinely generated hazardous wastes. Laboratory clean-outs, on the other hand, involve an evaluation of the laboratory's chemical inventory and the removal of excess/outdated/expired ("legacy") chemicals. Each of these types of events is regulated differently.

Based on the definition of "laboratory clean-out" at 40 CFR 262.200, a regularly scheduled removal of unwanted materials does not qualify as a laboratory clean-out.

Does Hazardous Waste Generated as Part of a Laboratory Clean-Out under Subpart K Count toward Generator Status Determination?

Subpart K regulations allow laboratory clean-outs that are conducted once per 12-month period per laboratory to be eligible for special clean-out procedures. For example:

- Laboratories have 30 days to conduct a laboratory clean-out, and there are no limits on the volume of unwanted materials that may accumulate in the laboratory during that time.
- For the purposes of onsite accumulation, an eligible academic entity is not required to count a hazardous waste that is an unused commercial chemical product (i.e., P- and U-listed hazardous wastes) and unused characteristic hazardous wastes generated solely during the laboratory clean-out toward its generator status determination.
- For the purposes of offsite management:
 - An eligible academic entity must count all its hazardous waste, regardless of whether the hazardous waste was counted toward generator status determination.
 - If an academic entity generates more than 1 kilogram per month of acute hazardous waste or more than 100 kilograms per month of hazardous waste (i.e., the conditionally exempt small quantity generator (CESQG) limits of 40 CFR 261.5), the hazardous waste is subject to all applicable hazardous

waste regulations when it is transported offsite.

Do Laboratory Clean-Outs Affect Who is a Large Quantity Generator?

If a facility maintains its normal generator status of conditionally-exempt small quantity generator (CESQG) or small quantity generator (SQG) because of not having to count unused hazardous waste from a laboratory clean-out (i.e., does not get bumped up to a large quantity generator (LQG)), a Biennial Report is NOT required.

If a facility is normally a LQG because of routine laboratory operations and/or non-laboratory operations, and continues to be a LQG despite not counting unused hazardous waste towards its generator status, a Biennial Report is required for *all* hazardous waste, including laboratory clean-out hazardous waste.

What Biennial Reporting Requirements Remain the Same under Subpart K?

LQGs have to count and report the following hazardous waste just as they always have on the Generation and Management (GM) Form of the Biennial Report. For example:

- Routinely generated laboratory hazardous waste (e.g., spent solvents, spent acids/bases); and
- Hazardous waste from non-laboratory operations (e.g., hazardous waste from vehicle or facility maintenance).

In reporting the above wastes, LQGs must use one of the source codes provided in the Biennial Report instructions, except G17 (i.e., Subpart K laboratory clean-out waste).

[Exhibit B-1](#) provides an example of how to complete a GM Form for a common laboratory waste: “spent halogenated solvents.”

What Biennial Reporting Requirements are Different under Subpart K?

In reporting laboratory clean-out waste, LQGs have to use source code G17 (i.e., Subpart K laboratory clean-out waste) to report unused commercial chemical products and unused characteristic hazardous wastes that are not counted toward generator status determination because they are from a laboratory clean-out. Examples of laboratory clean-out wastes include: unused solvents and unused acids/bases.

[Exhibit B-2](#) provides an example of how to complete a GM Form for unused acetone that is being discarded as part of a once-per-12 month laboratory clean-out under Subpart K.

Additional Information Sources

- “Implementation of Academic Laboratories Rulemaking” Web Site at: <http://www.epa.gov/wastes/hazard/generation/labwaste/implementation.htm>, last accessed on July 15, 2011.
- “Hazardous Waste at Academic Laboratories - Final Rule: Frequent Questions,” June 17, 2009. Available online at: <http://www.epa.gov/wastes/hazard/generation/labwaste/lab-faqs2.htm>, last accessed on July 15, 2011.
- “Standards Applicable to Generators of Hazardous Waste; Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material at Laboratories Owned by Colleges and Universities and Other Eligible Academic Entities Formally Affiliated With Colleges and Universities,” 73 FR 72912, December 1, 2008. Available online at: <http://www.epa.gov/fedrgstr/EPA-WASTE/2008/December/Day-01/f27863.pdf>, last accessed on July 15, 2011.
- “EPA Finalizes Rule to Help Academic Laboratories Safely Manage Their Hazardous Waste,” EPA530-F-08-027, November 2008. Available online at: <http://www.epa.gov/wastes/hazard/generation/labwaste/lab-fs2.pdf>, last accessed on July 15, 2011.

Exhibit B-1
Example of How to Report Routinely Generated
Laboratory Hazardous Waste under Subpart K

U.S. ENVIRONMENTAL PROTECTION AGENCY	
2009 Hazardous Waste Report	
WASTE GENERATION AND MANAGEMENT	
Sec. 1 A. Waste description: _____ B. EPA hazardous waste code(s) F002 _____ C. State hazardous waste code(s) _____ D. Source code G22 _____ E. Form code W202 _____ F. Quantity generated in 2009 130 _____ G. Waste minimization code _____ Management Method code _____ H. _____	
Sec. 2 Was any of this waste managed on site? <input type="checkbox"/> Yes (CONTINUE TO ON-SITE PROCESS SYSTEM 1) <input checked="" type="checkbox"/> No (SKIP TO SEC. 3)	
ON-SITE PROCESS SYSTEM 1 On-site Management Method code _____ Quantity treated, disposed, or recycled on site in 2009 _____ SITE PROCESS SYSTEM 2 Quantity treated, disposed, or recycled on site in 2009 _____	
Sec. 3 A. Was any of this waste shipped off site in 2009 for treatment, disposal, or recycling? <input checked="" type="checkbox"/> Yes (CONTINUE TO ITEM B) <input type="checkbox"/> No (FORM IS COMPLETE)	
Site 1 B. EPA ID No. of facility _____ C. Off-site Management Method code shipped to H040 _____ D. Total quantity shipped in 2009 130 _____	Site 2 B. EPA ID No. of facility _____ C. Off-site Management Method code shipped to H _____ D. Total quantity shipped in 2009 _____
Site 3 B. EPA ID No. of facility _____ C. Off-site Management Method code shipped to H _____ D. Total quantity shipped in 2009 _____	
Comments: _____	

HW code for spent halogenated solvents

Form code for concentrated halogenated solvent

Source code for lab analytical waste

Off-site management code for incineration

Exhibit B-2
Example of How to Report Laboratory Clean-Out
Hazardous Waste under Subpart K

U.S. ENVIRONMENTAL PROTECTION AGENCY		2009 Hazardous Waste Report	
WASTE GENERATION AND MANAGEMENT			
Sec. 1 A. Description: _____ B. EPA hazardous waste code(s) U002 _____ C. State hazardous waste code(s) _____ D. Source code G17 _____ E. Form code 203 _____ F. Quantity generated in 2009 00 _____ G. Waste minimization code _____ Management Method code for Source code G25 _____ UOM _____ Density _____ Sec. 2 Was any of this waste shipped off-site in 2009 for treatment, disposal, or recycling? <input type="checkbox"/> Yes (CONTINUE TO ITEM B) <input checked="" type="checkbox"/> No (SK) _____ ON-SITE _____ On-site Management Method code _____ Sec. 3 A. Was any of this waste shipped off site in 2009 for treatment, disposal, or recycling? <input checked="" type="checkbox"/> Yes (CONTINUE TO ITEM B) <input type="checkbox"/> No (FORM IS COMPLETE) Site 1 B. EPA ID No. of facility _____ C. Off-site Management Method code shipped to H040 D. Total quantity shipped in 2009 40 Site 2 B. EPA ID No. of facility _____ C. Off-site Management Method code shipped to H D. Total quantity shipped in 2009 _____ Site 3 B. EPA ID No. of facility _____ C. Off-site Management Method code shipped to H D. Total quantity shipped in 2009 _____ Comments: _____			

HW code for unused acetone

Form code for concentrated non-halogenated solvent

Source code for Subpart K lab clean-out waste

Because lab clean-out HW is not counted toward generator status, quantity generated is 0.

Since it is HW, it is reported as shipped off-site as HW.

Off-site management code for incineration

Reporting Laboratory Clean-out Waste

G17 is a source code added to the Biennial Report for Subpart K laboratory clean-out hazardous waste.

This exhibit provides an example of how to report unused acetone that is being discarded as part of a once-per-12 month laboratory clean-out under 40 CFR Part 262, Subpart K (i.e., the Academic Laboratory Rule).

APPENDIX C: EXAMPLES ON HOW TO COMPLETE BIENNIAL REPORT FORMS

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSD Flowchart) / Go to [Table of Contents](#))

This appendix provides examples on how to complete Biennial Report forms.²³

Example 1: Wastewater Treatment Unit Subject to NPDES Permit under Section 402 of the Clean Water Act

Scenario:

- Hazardous waste represented by Form Code W101 (very dilute aqueous waste containing more than 99% water)
- Onsite management of the waste using Management Method Code H135 (discharge to sewer/POTW or NPDES)
- Wastewater treatment unit subject to an NPDES permit under Section 402 of the Clean Water Act (CWA)

Questions

- Is the wastewater stream exempt from the Biennial Report requirements?
- What value should be assigned to the "Include in National Report" flag?

Answers

Wastewater treatment unit was subject to NPDES permit under CWA Section 402. In addition, based on information provided by the EPA Region/State, the hazardous waste was managed in an exempt WWTU. As a result, this waste should not be counted toward generator status determination nor should it be part of the Biennial Report.

²³ Examples presented in this appendix were provided by States and EPA Regions.

The "Include in National Report" flag should be set as "N" (No) if the State requires waste handlers to report all wastewater (exempt or non-exempt).

Example 2: Wastes Discharged to Sewer/POTW or NPDES

Scenario:

- Hazardous waste represented by Form Code W119 (other inorganic liquid)
- In describing the waste, the facility stated: "Rinse water from metal finishing operations where chromates, cyanides, acid, and alkalis are used in process. (Form Codes 105, 107, and 110 are applicable)"
- Onsite management of the waste using Management Method Code H135 (discharge to sewer/POTW or NPDES)

Questions

- Is the wastewater stream exempt from the Biennial Report requirements?
- What value should be assigned to the "Include in National Report" flag?

Answers

Based on information provided by the EPA Region/State, hazardous waste was not managed immediately upon generation in a WWTU. As a result, this waste should be counted toward generator status determination and part of the Biennial Report.

The "Include in National Report" flag should be set as "Y" (Yes).

Example 3:
Wastes Managed in Exempt
Wastewater Treatment Unit
and Underground Injection Well

Scenario:

- Hazardous waste represented by Form Code W101 (very dilute aqueous waste containing more than 99% water)
- In describing the waste, the facility stated: "A slip stream of water is sent to the local POTW to qualify refinery for wastewater exemption. The rest is decharacterized and disposed as non-hazardous waste in Class I disposal well."²⁴
- Onsite management of the waste using Management Method Code H134 (deepwell or underground injection) and Management Method Code H135 (discharge to sewer/POTW or NPDES)

Questions

- Is the wastewater stream exempt from the Biennial Report requirements?
- What value should be assigned to the "Include in National Report" flag?

Answers

Hazardous waste was managed in an exempt WWTU. In addition, non-hazardous wastewaters were injected in Class I injection wells (i.e., industrial and municipal waste wells). As a result, this waste should not be counted toward generator status determination nor should it be part of the Biennial Report.

The "Include in National Report" flag should be set as "N" (No) if the State requires waste handlers to report all wastewater (exempt or non-exempt).

Example 4:
Wastewater Treatment Unit
Subject to Pretreatment Requirements
of Section 307(b) of the Clean Water Act

Scenario:

- Hazardous waste represented by Form Code W505 (metal bearing sludges not containing cyanides)
- Onsite management of the waste using Management Method Code H135 (discharge to sewer/POTW or NPDES)
- Wastewater treatment unit subject to pretreatment requirements of Section 307(b) of the Clean Water Act (CWA)

Questions

- Is the wastewater stream exempt from the Biennial Report requirements?
- What value should be assigned to the "Include in National Report" flag?

Answers

Wastewater treatment unit was subject to pretreatment requirements under CWA Section 307(b). In addition, based on information provided by the EPA Region/State, the hazardous waste was managed in an exempt WWTU. As a result, this waste should not be counted toward generator status determination nor should it be part of the Biennial Report.

The "Include in National Report" flag should be set as "N" (No) if the State requires waste handlers to report all wastewater (exempt or non-exempt).

²⁴ There are five classes of underground injection control (UIC) wells: industrial and municipal waste disposal wells (Class I), oil and gas related wells (Class II), mining wells (Class III), shallow hazardous and radioactive injection wells (Class IV), and shallow non-hazardous injection wells (Class V). Federal regulations applicable to UIC wells may be found at 40 CFR Parts 144-148.

Example 5:
Wastewater Not Managed Immediately
upon Generation in Onsite Elementary
Neutralization Unit, Wastewater
Treatment Unit, or Totally Enclosed
Treatment Facility

Scenario:

- 1,1,1-TCA contaminated ditch water at a former site.
- The hazardous wastewater stream was treated in less than 90-day containers and then it was injected as non-hazardous in onsite Safe Drinking Water Act (SDWA) underground injection control (UIC) Class I injection well.

Questions

- Is the wastewater stream exempt from the Biennial Report requirements?
- What value should be assigned to the "Include in National Report" flag?

Answers

From validating with the facility, the waste was not managed immediately upon generation in an onsite elementary neutralization unit, wastewater treatment unit (WWTU), or totally enclosed treatment facility. The wastewater should be reported and thus, EPA Region 10 marked "Y" (Yes) for the "Include in National Report" flag.

If the form or comment box does not contain sufficient information to make a determination as to whether the waste should be included in the Biennial Report, please contact the facility for clarification on whether the wastewater is managed in an onsite elementary neutralization unit, WWTU, or totally enclosed treatment facility immediately upon generation.

Example 6:
Wastes Discharged to
Sewer/POTW or NPDES

Scenario:

- Acidic wastewater (D002) discharged to the acid sludge treatment system.
- The waste is treated onsite through a WWTU immediately upon generation (stated in the comment field).

Questions

- Does the wastewater meet the wastewater exemption?
- Should the wastewater be included in the National Biennial Report?

Answers

Oregon takes any waste with the onsite management method code of H136 (equivalent to H135, discharge to sewer/POTW or NPDES) out of the Biennial Report because it fits into the group of non-reportable wastes: "Do not report wastes managed immediately upon generation only in on-site elementary neutralization..." So, it is not reportable.

The "Include in National Report" flag should be set as "N" (No) if the State requires waste handlers to report all wastewater (exempt or non-exempt).

Example 7:
Process Wastewater Pumped in a
Closed Pipe System into a NPDES
Permitted Wastewater Treatment Unit

Scenario:

- Wastewater was through piping connected from the boiler to an inter-connected piping system of frac-tanks meeting the requirements of a totally enclosed treatment facility.
- Waste sludge, filters or residue was generated from the system.

Question

- Do the wastes need to be reported if the process wastewater is pumped in a closed pipe system into a NPDES permitted wastewater treatment unit where undergoes biological treatment?

Answer

The wastewater as such does not need to be reported. See Hazardous Waste Instructions and Forms booklet (Section "Wastes Not to be Reported"), which identifies "Wastes managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10 (40 CFR 261.5(c)(2)). Check whether West Virginia deletes forms that are not reportable or requires all waste, including hazardous wastewater reporting, then West Virginia should mark "N" (No) for the "Include in National Report" flag.

Example 8:
Wastes Sent to a
One-Year Storage Facility

Scenario:

- A generator sends waste (e.g., spent solvent) to a permitted one-year storage facility that signs manifest and returns it to the generator.
- This permitted storage facility then sent the waste on a new manifest to a treatment facility for energy recovery. The fuel blender/energy recovery facility sends a certificate of destruction back to the original generator.

Question

- How does the generator fill in GM Form?

Answer

Original generator lists the first receiver and management method code H141 – i.e., spent solvent generator needs to fill in EPA ID number of the one-year permitted storage facility and management method code H141 in the GM Form, Section 3 (Off-Site Shipment).

The receiver re-manifests and lists the shipment on a GM Form with management method code H050 – i.e., one-year permitted storage facility must fill in the EPA ID number of the facility that managed the waste by energy recovery and management method code H050 in GM Form, Section 3.

Example 9: Wastes Sent to Storage, Bulking, and/or Transfer Facilities

Scenario:

- Commercial TSDF receives waste from offsite generators for storage or bulking and then are subsequently transferred to another TSDF for further treatment (e.g., fuel blending, incineration, distillation, etc.).

Questions

- What is the appropriate source code to use in the Biennial Report form?
- Should the amount of waste managed by storage or bulking be entered in the “quantity generated” field (GM Form, Section 1, Quantity Generated)?

Answers

The TSDF fills in WR Form and management method code H141. When the waste is subsequently shipped offsite to another TSDF, then the initial TSDF would use the GM Form (source code G61 and zero for generation quantity) and would report the management method code in GM Form, Section 3 (H061 if fuel blending; H050 if energy recovery), that best describes the way in which the waste was managed at the receiving facility.

Example 10: Changes in Site Ownership during the Reporting Year

Question

- If a facility changed ownership during a reporting year, yet kept the same EPA ID number, does each company need to submit a Biennial Report for their part of the year?

Answer

EPA requires hazardous waste data for a facility for the entire reporting year. The former and current owners of a facility may each submit a Biennial Report for their part of the year, or they may choose to consolidate their submission in one report, with comments stating which company generated which waste.

Example 11: Site Ownership When Leasing a Site

Question

- If a facility is on a site that is being leased from a landlord, should the landlord be listed as the “owner” of the site, or should the leasee be listed as the owner?

Answer

The property owner (e.g., the landlord) is the Legal Owner of the site and the business owner (e.g., the lease) is the Site’s Operator. It will be best to provide information for both the property owner (Site’s Legal Owner) and the business owner (Site’s Operator) and attach comments to identify the type of ownership.

Example 12: Submission of Biennial Report by Facilities on Tribal Land

Question

- Where would a facility on Tribal land file its Biennial Report?

Answer

In the case of a hazardous waste facility on Tribal land, the Biennial Report should go to the EPA Region. However, it could be that the State has more capacity to process Biennial Reports, so in essence they are working as a contractor for the Federal government or as a partner to the EPA Region. In these cases, the EPA Region may decide to delegate the report to the State.

Please note that facilities that are located in the Navajo Nation may be required to submit their Biennial Reports to the Navajo Nation Environmental Protection Agency (check and call its hazardous waste program at (928) 871-7995); however, EPA Region 9 still manages to submit and load facilities' Biennial Report to RCRAInfo.

Example 13: Groundwater Contaminated with Hazardous Waste

Question

- Does the facility need to submit a Biennial Report if it handled groundwater contaminated by hazardous waste?

Answer

Groundwater contaminated by hazardous waste—if meeting risk-based standards determined by State for listed wastes or decharacterized toxicity characteristic wastes by facility—is covered by the Contain-In Policy and therefore, it is out of RCRA Subtitle C regulations. The value of the “Include in National Report” flag should be set to “N” (No). However, if groundwater contaminated with hazardous waste was removed for treatment, storage, or disposal, it should be reported how it was managed but set generation as zero.

Example 14: Reclaimed versus Used/Reused

Question

- Reclaimed versus Used/Reused

Answer

In general:

- Reclaimed - not exempt and report, see 40 CFR 261.1.
- Used or reused - exempt, see 40 CFR 261.2(e).

However, making this determination is tricky and thus, it is important to know: (1) what type of material (listed or characteristic, spent material, sludge, by-product, commercial chemical product (CCP), or scrap metal) and (2) what type of recycling (use/reuse, reclamation, burning for energy, use constituting disposal).

APPENDIX D: INDIVIDUAL BIENNIAL REPORT DATA QUALITY CHECKS

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSDF Flowchart) / Go to [Table of Contents](#))

This appendix provides recommendations to implementers (i.e., States and EPA Regions) on the types of data quality checks that may be performed on individual Biennial Reports in order to improve the quality of the data. In particular, this appendix provides recommendations on data quality checks for:²⁵

1. [Site Identification \(Site ID\) Form](#);
2. [Generation and Management \(GM\) Form](#);
3. [Waste Received from Off-Site \(WR\) Form](#);
4. [Off-Site Identification \(OI\) Form](#);
5. [Treatment, storage, and disposal facility \(TSDF\) reports](#);
6. [Foreign country handlers](#);
7. ["Include in National Report" flag](#); and
8. [Post data-entry](#).

Data Quality Checks for the Site ID Form

Following is a list of items to check on Site ID Forms:

- Required fields are filled in (see Biennial Report file Spec guide).

²⁵ Information in this appendix is based on a presentation developed by Paula Canter from the Ohio Environmental Protection Agency and Jack Griffith from the Florida Department of Environmental Protection. EPA would like to acknowledge and thank both of them for their contribution to this document.

- If submitted on paper, whether the information is legible for data entry personnel.
- Whether the various codes used are valid.
- EPA ID number is valid.
- Determine whether you can use RCRAInfo Handler Module data if any of the owner/operator information is blank (or request data from submitter).
- Compare generator status against GM Forms.
- Waste codes are now required, if site is a generator.
- If a site checked "Y" in for "Treater, Storer, or Disposer of Hazardous Waste," verify against the "Operating TSD Universe" indicator in the "Handler Detail" table.
- If clues indicate the site was a short-term generator and the event is over, verify whether current generator status in the Site ID Form is correct
- If a site marked "Yes" for "Large Quantity Handler of Universal Waste," it is likely to be an error.

Data Quality Checks for the GM Form

Following is a list of items to check on GM Forms:

- Required fields are filled in (see Biennial Report file Spec guide).
- If submitted on paper, whether the information is legible for data entry personnel.
- Whether the various codes used are valid.

Section 1 – Waste Characteristics

- Density and density unit of measure (UOM) must be provided for volumetric quantities (i.e., G [gallons], L [liters], and Y [cubic yards]). Otherwise optional, but recommended.
- Is density within a reasonable range for the density UOM?
- The waste minimization code is required.
 - “X” (i.e., no waste minimization efforts were implemented for this waste) is the default.
 - An answer of “Y” (i.e., waste minimization was implemented and was successful in reducing quantity and/or toxicity) or “N” (i.e., waste minimization efforts were unsuccessful in reducing quantity and/or toxicity) requires a comment.
- The form code should be “W309” (i.e., batteries, battery parts, cores, casings), if the waste is batteries.
- If the form code is “W004” (i.e., lab packs from any source containing acute hazardous waste), then the waste must have at least one acute waste code
- If the form code is “W001” (i.e., lab packs from any source not containing acute hazardous waste), then the waste cannot have any acute waste code.
- The source code should be “G11” (i.e., discarding off-specification, out-of-date, and/or unused chemicals or products) for off-spec or out-of-date waste.
- If the source code is “G61” (i.e., hazardous waste received from off-site for storage/bulking and transfer off-site for treatment or disposal), then the quantity generated should be zero because it was transferred waste.
- If the source code is “G25” (i.e., hazardous waste management), the site must provide a management method code for the waste stream.
- If the source code is not equal to “G25” (i.e., hazardous waste management), then the waste stream should not have management method code.
- If reporting still bottoms from recycling, did they check “Y” for “Recycler of Hazardous Waste” on the Site ID Form?

- The combination of source code “G25” (i.e., hazardous waste management) and management method code “H141” (i.e., the site receiving this waste stored/bulked and transferred the waste with no treatment or recovery, fuel blending, or disposal at that receiving site) is illogical.

Section 2 – On-Site Generation and Management of Hazardous Waste

- If “On-Site” is equal to “Yes,” is the management required to be reported because:
 - It is a process that requires a permit (check RCRAInfo unit information).
 - The waste is accumulated on-site prior to management in an exempt unit (will have to contact the site to find out details).
 - The method is underground injection.If none of the above apply, it is very likely it should not be reported (neutralization, exempt wastewater management).
- Is the management method code the correct one for this process?
- If two systems are reported, are the quantities identical? If so, it is likely the information is not reported correctly.

Section 3 – Off-Site Shipment of Hazardous Waste

- Verify that “Shipment Off-Site” is correct.
- Verify that the EPA ID number is valid, the receiving site is a hazardous waste receiver (and not a transporter only), and that the management method code is a method that the receiving facility conducts.
- Compare the shipment quantity to generated quantity. If the results of the comparison seem odd, different UOMs may have been used. Generally, the quantities are similar.
- If waste was shipped to an in-State TSDF that submits WR Forms, cross-check and contact generator and/or TSDF if there are significant discrepancies.
- Receiver on GM Form should be listed on OI Form, if using OI Form.
- Page number should be unique.

Data Quality Checks for the WR Form

Following is a list of items to check on WR Forms:

- Required fields are filled in (see Biennial Report file Spec guide).
- If submitted on paper, whether the information is legible for data entry personnel.
- Whether the various codes used are valid.
- If the customer's EPA ID number appears to be a permanent one, is it valid and does it start with a State code?
- Is the management method code one that this facility conducts?
- If the form code is "W004" (i.e., lab packs from any source containing acute hazardous waste), then the waste must have at least one acute waste code
- If the form code is "W001" (i.e., lab packs from any source not containing acute hazardous waste), then the waste cannot have any acute waste code.
- Page number should be unique.
- Received quantity cannot be zero.
- Receiver should not list self as a customer.
- Optional - Verify whether in-State conditionally exempt small quantity generator (CESQG) customers with "dummy" ID numbers actually have permanent ID numbers.

Data Quality Checks for the OI Form

Following is a list of items to check on OI Forms:

- If waste was shipped off-site and your State requires it, was the OI Form included?
- Are all receivers on at least one GM Form?
- Are receivers who are not transporters marked as such?
- Are all receiver and transporter ID numbers valid?
- Is at least one transporter included?

- Are all ID numbers marked as "generators" listed as such on a WR Form?
- Are addresses provided for all handlers except those which are only transporters?
- Cross-out duplicate ID number entries and consolidate Handler type info.
- OI Form data should not be uploaded in the Biennial Report files.

Data Quality Checks for Treatment, Storage, and Disposal Facility Reports

Following is a list of items to check on TSDF reports:

- Does the sum of GM Form "G61" shipments (i.e., hazardous waste received from off-site for storage/bulking and transfer off-site for treatment or disposal) reasonably correspond with the sum of WR Form "H141" records (i.e., the site receiving this waste stored/bulked and transferred the waste with no treatment or recovery, fuel blending, or disposal at that receiving site)?
- Does the sum of GM Form fuel blended waste shipments reasonably correspond with WR Form "H061" (i.e., fuel blending prior to energy recovery at another site) totals? (Exempt used oil may be included in error.)
- Are there "Source Code G25" GM Forms with residuals for the management methods the TSDF conducts? Examples:
 - Landfill leachate;
 - Incinerator ash;
 - Still bottoms (which may have been fuel blended onsite); and
 - Fuel blended waste shipped for energy recovery.

Data Quality Checks for Foreign Country Handlers

Following is a list of items to check on foreign country handlers:

- “Foreign country handlers” are identified by:
 - “FC” followed by the name of the foreign country.
 - A State-defined ID number beginning with “FC”.
- However, some have been ID numbers assigned by implementers that begin with a State code.
- If a State includes these in their data (it is optional), they should be identified with “FC.”

Data Quality Checks for “Include in National Report” Flag

Following is a list of items to check for the “Include in National Report” flag:

- If site was a large quantity generator (LQG) or permitted TSDF during the reporting year, the Site ID Form “Include in National Report” flag should be “Y” (Yes). How you determine that is up to you, but the “Reason for Submittal” field in the Site ID Form should help.
- If the Site ID Form “Include in National Report” flag is “N” (No), all GM Form and WR Form “Include in National Report” flags must be equal to “N.”
- If a waste should be reported under Federal requirements, the GM and/or WR Form “Include in National Report” flag should be “Y” (Yes).
- For forms reporting State-specific waste only, the “Include in National Report” flag should be “N” (No).

Data Quality Checks for Post-Data Entry

Following is a list of items for post-data entry checking:

- Check facility quantities against previous cycle year data for major outliers.
- Check shipped versus received quantities nationally and inside the State.
- Circulate summary reports to districts, inspectors, and permittees to verify or point out omissions.

APPENDIX E: SETTING FLAGS FOR THE BIENNIAL REPORT (SUPPORTING INFORMATION FOR IMPLEMENTERS)

(Go to [Exhibit ES-2](#) (Generator Flowchart) / Go to [Exhibit ES-3](#) (TSDF Flowchart) / Go to [Table of Contents](#))

This appendix provides additional information to implementers (i.e., States and EPA Regions) on how to develop some of the data elements that need to be submitted to RCRAInfo as part of the Biennial Report data collection process. These RCRAInfo data requirements were developed from the recommendations in the WIN/INFORMED Universe Identification and Waste Activity Monitoring Program Area Analysis (UID/WAM PAA). Implementers will need to follow these procedures in submitting their Biennial Report data. In particular, this appendix explains to implementers:

1. [How to set the “Federal Generator Status” for the RCRA Subtitle C Site Identification Form \(Site ID Form\)](#); and
2. [How to set the “Include In National Report” flags for the Site ID, Generation and Management \(GM\), and Waste Received from Offsite \(WR\) Forms](#).

How to Set the “Federal Generator Status” for the Site ID Form

As part of the recommendation in the UID/WAM PAA for creating the Site ID Form, the States and EPA agreed to a related requirement:

Collect both State and Federal generator status from States. The generator status submitted to EPA’s RCRAInfo system for each RCRA Site will now require two values to be provided: one for the generator status as defined by the State regulations; and a second for the equivalent Federally defined generator status.

States will report their State Generator Status as identified by their own regulatory definitions and will also report the generator universe as identified by the Federal regulatory definition based on the best of their ability to determine it. For many States this will be the same data; for States that are either more stringent or broader in scope than the Federal regulations, however, these values may differ for some of their RCRA Sites. Every RCRA Site will have two generator statuses in the system - the State defined status and the Federal defined status.

Note: Reporters are instructed to indicate on the Site ID Form their generator status **as of the date** submitting the Site ID Form. Some sites may have changed their status by the time they submit the report.

How to Set the “Include in National Report” Flags for the Site ID, GM, and WR Forms

Waste generation and management information reported on the Biennial Report forms (GM and WR Forms) will be used to produce ***The National Biennial RCRA Hazardous Waste Report*** (National Biennial Report) that summarizes generation, management, shipment, and receipt volumes for the nation. When compiling the report data, EPA must be able to distinguish waste that is counted for the national report from waste that should not be counted.

The following discussion explains what will be included in the National Biennial Report, what implementers will submit to EPA, and how EPA will compile the data for the report.

What EPA Will Include in the National Biennial Report

EPA has created flags in RCRAInfo at both the RCRA site level (Site ID Form) and the waste level (GM and WR Form). EPA will use these to differentiate the waste to be used for calculations in the National Biennial Report from other wastes. The flag is referenced as "Include in National Report."

In the Hazardous Waste Report Instructions and Form booklet [EPA Form 8700-13 A/B] (Section "Instructions for Filing the Hazardous Waste Report," Subsection "Which Forms to Submit and What to Report"), EPA states what the RCRA site must report on GM and WR Forms:

A site required to file the Hazardous Waste Report must submit Waste Generation and Management (GM) Form(s) for all hazardous waste that was used to determine the site's generator status.

A site required to file the Hazardous Waste Report must submit Waste Received From Off-site (WR) Form(s) if, during the reporting year, it received RCRA hazardous waste from off-site and managed the waste on-site (including subsequent transfer off-site).

See instructions for filling out the GM and WR Forms.

It is the responsibility of each implementer (i.e., State or EPA Region) to determine which sites and wastes should be included and excluded. The implementer must provide either a "Yes" or "No" flag for each Site ID Form and for each of the site's GM and/or WR Forms. The implementer must set the Site ID Form flag to "Yes" for those sites that were Federal large quantity generators (LQGs) or treatment, storage, and disposal facilities (TSDFs) during the reporting year. The implementer must set the Site ID Form flag to "No" for those generator sites that were not Federal LQGs and are also not TSDFs.

For those sites which have the Site ID Form flag set to "Yes," the implementer must determine whether a waste will be counted. The implementer must set the flag to "Yes" for every

GM and WR Form that he/she wants EPA to use for the National Biennial Report. The implementer would set a specific GM or WR Form flag to "No" if the form has, for example, only State-waste codes (i.e., a form without any Federal RCRA waste codes).

Note: Some sites may have changed their status by the time they submit the report. These reporters will mark the Site ID Form generator status box and TSD status box according to their site's status ***as of the date they certify the Site ID Form***. The implementer will need to review the comments provided on the Site ID Form comments box and the GM Form data to determine whether their Site ID Form flag should be set to "Yes."

If the implementer sets the Site ID Form flag to "No," EPA will not use data from any of the site's GM or WR Forms. For example, EPA would not compile any of the wastes reported for a small quantity generator (SQG) since its Site ID Form flag would be set to "No." The implementer must also set the flag for every GM and WR Form submitted for these sites to "No."

What Implementers Submit to EPA

EPA's Hazardous Waste Report Instructions and Forms booklet [EPA Form 8700-13 A/B] contains only the requirements for Federal RCRA reporting. Many States require sites to submit a variety of other information with the Federally required data (see instructions for filing the Hazardous Waste Report and instructions for filling out the GM and WR Forms). You can only maintain data in RCRAInfo for sites that have EPA Identification numbers and for the data fields shown on the Federal forms. Implementers have three options for maintaining the data in RCRAInfo.

- **Option 1.** The implementer wants to maintain in RCRAInfo all the data he/she received from all sites. The implementer would submit all the data collected (limited to data fields shown on the Federal form) from all the sites for his/her State. The implementer would set the "Include in National Report" flag to either "Yes" (Y) or "No" (N) for each Site ID Form. A site's data may be maintained even if the site only reported non-Federal, State-only information on a GM or WR Form; in this case, the

"Include in National Report" flag must be set to "No" for the specific GM or WR Forms.

- **Option 2.** The implementer would use this option if he/she wants to maintain in RCRAInfo all the data only for those sites that are to be included in the National Biennial Report. The implementer would only submit data for the sites which have the flag set to "Yes." He/she would submit all of these sites' GM or WR Forms; the forms would be set to either "Yes" or "No."

Note: The implementer may have a TSDf which did not generate or manage waste during the reporting year. Since they must report, the implementer would set the Site ID Form flag to "Yes" even if they do not have GM or WR Forms.

- **Option 3.** This option is similar to Option 2. The implementer would use this option if he/she wants to maintain in RCRAInfo only the sites that are to be included in the National Biennial Report, but maintain only the waste data used to compile the report. As in Option 2, the implementer would select only those sites that have "Yes" for the Site ID Form flag. For these sites, however, the implementer would submit only those GM or WR Forms with flags set to "Yes." The implementer would not submit any GM or WR Forms that are set to "No."

Note: The implementer may have a TSDf which did not generate or manage waste during the reporting year. Since TSDFs must report, the implementer would set the Site ID Form flag to "Yes" even if they do not have GM or WR Forms.

How EPA Will Compile the Data for the National Biennial Report

The first step for all the calculations is the selection of those RCRA Sites with the Site ID Form flag is set to "Yes."

From the submitted data, EPA will compile the total number and a list of Current LQGs and Current Non-LQGs reporting and the quantity of RCRA hazardous waste they generated. EPA also will compile the total number and list of Current TSDFs and Current Non-TSDFs reporting and the quantity of RCRA hazardous

waste they managed. EPA will also calculate several other quantities, including: waste shipped, waste received, interstate waste shipped, and interstate waste received.

Data that Will be Included in the National Biennial Report

For those sites which have the Site ID Form flag set to "Yes," the implementer must determine whether a waste will be counted. The implementer must set the flag to "Yes" for every GM Form and WR Form that he/she wants EPA to use for the National Biennial Report. The implementer would set a specific GM or WR Form flag to "No" if the form has, for example, only State-waste codes (i.e., a form without any Federal RCRA waste codes).

See the discussions below for setting the flag for reporters that have no GM or WR Form for the National Biennial Report, for reporting waste exported (shipped off-site) to foreign countries, for reporting on-site management without a RCRA permit, and for setting the flag for management that should not be reported under the Federal rules.

Reporters with No GM Form Set to "Yes"

If the reporter has no GM Forms set to "Yes," then the flag at the Site ID Form level should be set to "No." States may include these reporters in the data in RCRAInfo but we will not show them in the National Biennial Report. All reporting TSDFs, however, must be set to "Yes" even if they have no GM or WR Forms set to "Yes;" the National Biennial Report lists all reporting TSDFs.

Foreign Exports

Some States require reporting of waste exported (shipped off-site) to foreign countries. The Hazardous Waste Report Instructions and Form booklet indicates that generators should not use the Biennial Report GM Form for Federal exports of hazardous waste:

*RCRA hazardous wastes exported directly to a foreign country **should not be reported** on the GM Form (unless required by your state). Facilities that export hazardous waste must file a*

separate Annual Report under 40 CFR 262.56.

However, some States require this waste to be reported in the Biennial Report. In these cases, waste shipped off-site (Section 3) to foreign countries (EPA ID to which waste was shipped is entered as FC with foreign country name) should be marked “Yes.” These reports will be included in the National Biennial Report.

On-Site Management without a RCRA Permit

There seems to be some confusion generators reporting treatment and recycling activities without being permitted TSDs, i.e., not having a Federally required RCRA permit (and marking the TSD or recycler boxes on the Site ID Form); some States, nevertheless, require permits for these activities (the implementer would know if his/her State has this rule). Several types of treatment and recycling are allowed without a permit. Some examples are: decharacterization of D001, D002, and D003 wastes in containers; and recycling solvents. So, there are several management method codes that generators might list in GM Form Section 2. These data should be set as “Yes” for “Include in National Report.”

Wastewaters

(Go to [Part 2](#) for additional information)

If in the Federal scheme a waste should not be reported, then the State must set the flag for such a GM Form as “No” for the “Include in National Report” when including the data with the other data files for RCRAInfo. A State may, alternatively, elect to delete such GM Forms and thereby not send it to RCRAInfo. The implementer must review the GM Forms in order to determine whether the wastewater should be included or excluded.

The implementer may take the following steps to identify hazardous wastewaters and determine whether these wastewaters should be included or excluded:

- Based on data reported in GM Forms, develop a list of waste streams managed onsite that are represented by management method codes:
 - H070 (chemical treatment - reduction/destruction/oxidation/precipitation)²⁶;
 - H081 (biological treatment);
 - H100 (physical treatment only), with special interest on waste streams managed through adsorption or air/stream stripping²⁷;
 - H121 (neutralization only); and
 - H135 (discharge to sewer/POTW or National Pollutant Discharge Elimination System (NPDES)).
- Conduct research on these waste streams, if relevant, by:
 - Obtaining and reviewing process information; and
 - Finding how the waste is managed after generation.
- Compare information compiled through research to the relevant regulations.

²⁶ For reporting year 2013, previous codes H071 (chemical reduction), H073 (cyanide destruction), H075 (chemical oxidation), H076 (wet air oxidation) and H077 (other chemical precipitation) were all consolidated under the new management method code H070.

²⁷ For reporting year 2013, previous H082 (adsorption), H083 (air or steam stripping), H101 (sludge treatment and/or dewatering), H103 (absorption), H123 (settling or clarification), and H124 (phase separation) were all consolidated under the new management method code H100. Of special interest for purposes of identifying hazardous wastewaters are waste streams managed onsite through adsorption or air/stream stripping (i.e., previous management method codes H082 or H083).

- Find out if the waste is managed in such a way that exempts it from reporting – whether the hazardous waste is **managed immediately upon generation in an onsite elementary neutralization unit, WWTU, or totally enclosed treatment facility**.

If the hazardous waste is managed immediately upon generation in an onsite elementary neutralization unit, WWTU, or totally enclosed treatment facility, the “Include in National Report” flag should be set as “N” (No).

**APPENDIX F:
RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
BIENNIAL REPORT REQUIREMENTS FOR COMPREHENSIVE
ENVIRONMENTAL RESPONSE, COMPENSATION, AND
LIABILITY ACT (CERCLA) RESPONSE ACTIONS**

(Go to [Table of Contents](#))



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

DEC 14 2011

MEMORANDUM

SUBJECT: Resource Conservation and Recovery Act (RCRA) Biennial Report Requirements for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Response Actions

FROM: James E. Woolford, Director
Office of Superfund Remediation and Technology Innovation

Suzanne Rudzinski, Director
Office of Resource Conservation and Recovery

Lawrence Stanton, Director
Office of Emergency Management

Reggie Cheatham, Acting Director
Federal Facilities Restoration and Reuse Office

TO: Superfund National Policy Managers, Regions 1-10
Regional RCRA Directors, Regions 1-10

Purpose

This memorandum reaffirms the need for the regions to be aware of biennial reporting requirements under the Resource Conservation and Recovery Act (RCRA) and their applicability to the cleanup process under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. § 9601, *et. seq.*¹ The intent of this memo is to serve as a reminder

¹This document provides guidance to Regional staff regarding how the Agency interprets and implements the National Oil and Hazardous Substance Pollution Contingency Plan (NCP), which provides the blueprint for CERCLA implementation. However, this document does not substitute for those provisions or regulations, nor is it a regulation itself. Thus, it cannot impose legally binding requirements on EPA, states, or the regulated community, and may not apply to a particular situation based upon the circumstances. Any decisions regarding a particular situation will be made based on the statute and the regulations, and EPA decision-makers retain the discretion to adopt approaches on a case-by-case basis that differ from the guidance where appropriate.

that compliance with biennial reporting requirements is a continuing obligation which must be addressed throughout the CERCLA cleanup process, and to provide guidance in determining under what circumstances a Biennial Report must be submitted by a hazardous waste large quantity generator (LQG) to its authorized state, or EPA regional office if there is no authorized state.

Background

What is the RCRA Biennial Report?

The RCRA Biennial Report, undertaken pursuant to the Resource Conservation and Recovery Act, 42 U.S.C. §6901, *et seq.*, requires that at least every two years LQGs² report to EPA or authorized states, the quantities, nature and disposition of generated hazardous waste, and the treatment, storage and disposal facilities report on the wastes they manage.³ This information is used to develop a National Biennial Report that summarizes the reported data for the public, government agencies and the regulated community.

Biennial reporting requires LQGs to report by March 1 of every even-numbered year, their hazardous waste management activities for the previous odd-numbered calendar year. States authorized by EPA to implement the RCRA biennial reporting portions of the program may have their own forms and may have more frequent reporting schedules.⁴ A list of state contacts, reporting frequency and form information can be found at: <http://www.epa.gov/epawaste/inforesources/data/biennialreport/index.htm>.

Biennial Reporting Requirement for CERCLA Response Actions

EPA considers the RCRA biennial reporting requirement an administrative requirement for purposes of CERCLA response actions. EPA has determined that CERCLA response actions conducted *on-site*⁵ generally should be subject only to substantive, not administrative requirements of state and other federal environmental protection laws, and that it would be inappropriate to formally subject on-site

² While RCRA regulations specifically define the quantities of hazardous waste generated on a monthly basis that constitute conditionally exempt small quantity generators (CESQGs), and small quantity generators (SQGs), RCRA regulations require reporting from Large Quantity Generators (LQG). However, by defining what constitutes CESQGs and SQGs, one can determine what constitutes a LQG; a generator that generates 1,000 kilograms or more of hazardous waste in a calendar month; a total of one kilogram of acute hazardous waste listed in 40 CFR 261.31-33 in a calendar month, or a total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in 40 CFR 261.31-33 in a calendar month. (See 40 CFR 261.5(e).)

³ The information is submitted on EPA Form §700-13 A/B. RCRA sections 3002 and 3004 (42 U.S.C. §§ 6922 and 6924) require EPA to establish standards for recordkeeping and reporting of hazardous waste. Section 3002 applies to hazardous waste generators and section 3004 applies to hazardous waste treatment, storage, and disposal facilities. The implementing regulations are found at 40 CFR §§ 262.40(b) and (d); 262.41(a)(1)-(5), (a)(8), and (b); 264.75(a)-(e) and (j); 265.75(a)-(e) and (j); and 270.30(i)(9). The respondents' submissions (reports) describe each generated hazardous waste, the activity by which they generated the waste, and the waste quantity; the reports also list the management method by which each waste is treated, recycled, or disposed and the quantity managed.

⁴ States requiring annual reporting include: (Region 1) Maine, New Hampshire; (Region 2) New Jersey, New York; (Region 3) Delaware, District of Columbia; (Region 4) Georgia, Kentucky, Mississippi, South Carolina, Tennessee; (Region 5) Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin; (Region 6) Arkansas, Louisiana, Oklahoma, Texas; (Region 7) Kansas, Missouri; (Region 8) Montana; (Region 9) Arizona, California, Guam; (Region 10) Idaho, Oregon, Washington.

⁵ Onsite response actions are those where EPA treats and/or disposes of the hazardous waste on-site that was generated by a remedial or removal action.

CERCLA response actions to the multitude of administrative requirements of other federal and state offices and agencies.⁶ Administrative requirements do not, in and of themselves, define a level or standard of control; they include the approval of, or consultation with, administrative bodies, issuance of permits, documentation, and reporting and recordkeeping.

In contrast, CERCLA cleanup actions involving treatment, storage and disposal of RCRA hazardous wastes at an off-site RCRA permitted facility are subject to all RCRA requirements, including administrative requirements such as biennial report submissions, for those wastes sent off-site.

Therefore, biennial report submissions for hazardous waste generated as a part of CERCLA response action should be consistent with the following:

- *On-site Hazardous Waste Management:* Any RCRA hazardous waste generated on-site as part of a Superfund response action and managed on-site must comply with all substantive RCRA requirements but need not comply with administrative requirements, such as RCRA biennial reporting requirements.
- *Off-site Hazardous Waste Management:* Any RCRA hazardous waste generated on-site as part of a Superfund response action and managed off-site is subject to all RCRA requirements, including, where applicable, biennial report requirements.⁷

On-scene coordinators (OSCs), remedial project managers (RPMs), potentially responsible parties (PRPs), and federal facility site managers have two options for complying with the biennial reporting requirements. These options are:

1. report all RCRA hazardous waste managed off-site without evaluating whether they are a LQG; or
2. determine if, in any single calendar month, the site is a LQG, by following the requirements in 40 CFR §§ 261 and 262; and if so, report all RCRA hazardous waste that is generated on-site, but managed off-site for the entire biennial reporting calendar year.⁸

Under Option 1, a facility/site would submit a Biennial Report of all RCRA hazardous waste shipments sent off-site during the biennial reporting calendar year (i.e., odd-numbered year). This would generally be the same as reporting the total amount of hazardous waste leaving the site and recorded in the hazardous waste manifest system during the year. Under this option, some Superfund sites would submit a Biennial Report even if they are not LQGs. If the site manager chooses to follow Option 1 but turns out to not be a LQG they would be considered a protective filer.

⁶ See Preamble to 1990 National Contingency Plan (NCP), 55 FR 8756.

⁷ Note: On average, about five full 55 gallon drums of hazardous waste is equal to 1,000 kilograms or more, which would trigger the LQG regulatory threshold for reporting.

⁸ LQGs are required to submit, by March 1 of each even-numbered year, a Biennial Report detailing their hazardous waste management activities for the previous odd-numbered calendar year.

Under Option 2, Superfund site managers would determine if the site is a LQG. In determining whether a site is a LQG the site manager must account for all waste generated each month by following the requirements in 40 CFR §§ 261 and 262, regardless of whether the waste is managed on-site or off-site. If the site is a LQG, then Superfund site managers would need to submit a Biennial Report for that portion of the hazardous waste that was generated on-site, but managed off-site for the entire biennial reporting calendar year.

For Superfund fund-lead response actions, EPA or their agents (i.e., U.S. Army Corps of Engineers or a contractor) would submit a Biennial Report. For PRP-lead cleanups, the PRP is responsible for reporting. For federal facilities, the lead federal facility overseeing the cleanup or their agent is responsible for reporting. Those responsible for reporting should carefully consider and clarify who should fill out and submit the report and work with their states (or the regional office if the state is not authorized) to ensure that required information is submitted to the appropriate entity. Attachment A provides questions and answers to address biennial reporting requirements for CERCLA response actions.

Training

In an effort to aid in completing the Biennial Report for CERCLA response actions, we will update Superfund training materials to highlight this reporting requirement.

Modifying Contracts to Address Biennial Reporting

Contractors are expected to support EPA site managers in performing biennial reporting functions. Regions are requested to incorporate into their existing response contracts and agreements the need to fulfill biennial reporting requirements and to submit the appropriate forms to the state environmental agency (or the regional office if the state is not authorized). Headquarters will also be modifying contracts that support regional cleanup work to include this evaluation and reporting requirement as a part of the standard statement of work.

Reference Materials

Additional information on the Biennial Report can be found at the following website:
<http://www.epa.gov/epawaste/inforesources/data/biennialreport/index.htm>

The RCRA Orientation Manual can be found at:
<http://www.epa.gov/epawaste/inforesources/pubs/orientat/>

For a detailed understanding of RCRA hazardous waste generator regulatory requirements, please see:
<http://www.epa.gov/epawaste/hazard/downloads/tool.pdf>

Conclusion

CERCLA response actions conducted entirely on-site generally should be subject only to substantive, not administrative, requirements of state and other federal environmental protection laws. RCRA biennial reporting requirements do not apply to CERCLA actions as long as hazardous waste is not

shipped off-site. However, CERCLA cleanup actions involving treatment, storage and disposal of RCRA hazardous wastes off-site are subject to all RCRA requirements, including biennial reporting requirements, for those wastes sent off-site.

To satisfy their biennial reporting requirement during a biennial reporting calendar year, hazardous waste generators at CERCLA sites may either: (1) report the total amount of waste leaving the site and recorded in the hazardous waste manifest system during the year, regardless of their generator status; or (2) determine if, in any single calendar month, the site is a LQG, and if so, report all RCRA hazardous waste that is generated on-site, but managed off-site for the entire calendar year.

For questions on addressing biennial reporting requirements under CERCLA, please contact the following staff:

- For issues concerning non-time critical removals and remedial actions contact Larry Zaragoza (Office of Superfund Remediation and Technology Innovation) at 703-603-8867.
- For issues concerning time critical and emergency removals contact Gilberto Irizarry (Office of Emergency Management) at 202-564-7982.
- For issues concerning working with PRPs contact Manuel Ronquillo (Office of Site Remediation Enforcement) at 202-564-6065.
- For RCRA-specific questions related to the Biennial Report contact Jim O'Leary (Office of Resource Conservation and Recovery) at (703) 308-8827.

Thank you for your time and attention in this matter.

Attachment

Attachment A Questions and Answers

Question: What RCRA regulatory requirements must EPA or its agents comply with when hazardous waste is shipped off-site as a result of a CERCLA response action?

Answer: EPA or its agents should follow the directions described under the Superfund document, "RCRA-Specific ARARs" found at:
<http://www.epa.gov/superfund/policy/remedy/sfremedy/arars/rcra.htm>.

Another useful document for providing additional information related to RCRA hazardous waste generator regulations is the *Hazardous Waste Generator Regulations: A User-Friendly Reference Document*. This document can be found at:
<http://www.epa.gov/epawaste/hazard/downloads/tool.pdf>.

Question: If RCRA hazardous wastes and other wastes are shipped to a facility for treatment, storage or disposal, what should be done to separate RCRA hazardous wastes and other wastes for reporting purposes?

Answer: The hazardous waste manifest form should be filled out so that it distinguishes between RCRA hazardous waste and other waste components, because any other waste component does not need to be reported in the Biennial Report. The RCRA hazardous waste component must always have a RCRA hazardous waste code for each hazardous waste shipped off-site to a RCRA treatment, storage, or disposal facility. Generally, only the RCRA hazardous waste should be reported when supplying information for the Biennial Report, but hazardous waste generators must be mindful that there may be additional state requirements for reporting.

Question: Who should report?

Answer: For Superfund fund-lead response actions, EPA or its agents (e.g. contractor, U.S. Army Corps of Engineers) should report the information required in the Biennial Report. For PRP-lead cleanups, the PRP is responsible for reporting. For federal facilities, the lead federal facility overseeing the cleanup or their agent is responsible for reporting.

Question: Where should EPA or its agents submit the Biennial Report?

Answer: You should send the report to the authorized state where the hazardous waste is generated, or if the state is not authorized, to the respective EPA Region. A list of state addresses and contacts can be found at
<http://www.epa.gov/osw/inforesources/data/form8700/contact.pdf>.

In addition, a copy of the instructions for the 2009 Biennial Report cycle can be found at <http://www.epa.gov/wastes/inforesources/data/br09/br2009rpt.pdf>.

Question: What action should be taken if the reporting threshold amount for a LQG is no longer met?

Answer: If a CERCLA response action had previously resulted in the site meeting the definition of LQG and a portion of that waste had been reported in a biennial reporting cycle, but the cleanup activity no longer qualifies as such, the site manager should let the RCRA federal or RCRA authorized state know of the change in status. This change is accomplished by filling out the RCRA Subtitle C Site Identification Form (EPA Form 8700-13 A/B found at <http://www.epa.gov/wastes/inforesources/data/br09/br2009rpt.pdf>.) and submitting it to either the authorized state office or Regional RCRA unit responsible for this reporting.