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: <u>Generators</u> (flowchart) and <u>Treatment, storage, and disposal facility (TSDF)</u> (flowchart); <u>Executive Summary</u>; "<u>Biennial Report: Reportable and Non-Reportable Wastes</u>" (entire document)

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

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EXECUTIVE SUMMARY

(Go to <u>Cover Page</u> / Go to <u>Table of Contents</u> / Go to EPA's Web page on the Biennial 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 RCRAInfo 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.

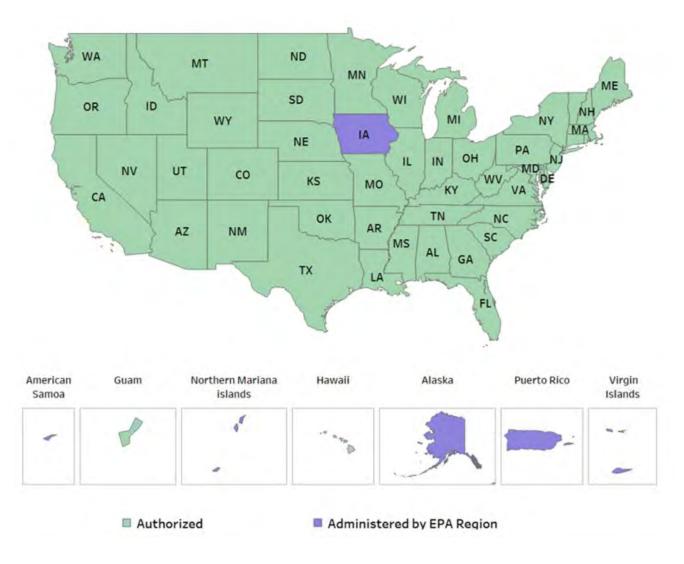
The purpose of this BR Document is to clarify and provide further details on the current Biennial Report Instructions, not to change the Biennial Report Instructions. The BR Document does not replace Federal laws or regulations. It simply compiles and summarizes information on the regulations and the associated regulatory citations in the Code of Federal Regulations (CFR) pertaining to the completion of the Biennial Report. The BR Document also identifies additional information resources (e.g., documents, web sites) that may be used as reference in determining whether a waste should be part of the Biennial Report. Please note that some States have regulations that may be more stringent and/or broader in scope than the counterpart Federal hazardous waste regulations. Therefore, you should consult the corresponding regulatory agency (i.e., Authorized State agency or EPA Region) in your State to clarify the applicable hazardous waste requirements.

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

Implementation of the Biennial Report Program

State authorization is a rulemaking process under which EPA delegates the primary responsibility of implementing the RCRA hazardous waste program to individual States in lieu of EPA. This process ensures national consistency and minimum standards while providing flexibility to States in implementing rules.

To achieve authorization, a State's program must be fully equivalent to, no less stringent than, and consistent with the Federal program. However, the State programs can be more stringent or broader in scope than the Federal regulations. The map below shows the implementing status of the Biennial Report program.



Source: U.S. Environmetal Protection Agency, "Authorization Status of All Resource Conservation and Recovery Act (RCRA) and Hazardous and Solid Waste Amendments (HSWA) Rules" Web page. Available at https://www.epa.gov/rcra/authorization-status-all-resource-conservation-and-recovery-act-rcra-and-hazardous-and-solid. Data current as of September 30, 2019.

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 (TSDF 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.
- Help EPA measure the quality of the environment, such as monitoring industry compliance with the regulations, evaluating waste minimization efforts taken by industry, supporting other regulatory activities (e.g., rulemaking, regulation assessment, implementation activities).
- Communicate the findings of EPA's hazardous waste reporting data collection efforts to the public, government agencies, and the regulated community. Data are summarized and communicated via RCRAInfo Web (https://rcrainfo.epa.gov/rcrainfoweb).1

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 VSQG)

LQG - Large quantity generator.

SQG - Small quantity generator.

VSQG - Very small quantity generator.

¹ The data presented on RCRAInfoWeb may change as regulators are allowed to make additions, corrections, and/or deletions to their data based on updated data received from facilities. Therefore, the data should be referenced as of the data extraction.

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 (i.e., F-code dioxin-containing wastes) or 40 CFR 261.33(e) (i.e., P-code wastes) in **at least one calendar month.** For Superfund sites, please see the memorandum "RCRA Biennial Report Requirements for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Response Actions," which is included as <u>Appendix F</u> to this document.

- Large quantity generators (LQGs) are subject to the Biennial Report under 40 CFR 262.41.^{2,3}
- Treatment, Storage, and Disposal Facilities (TSDFs) are subject to the Biennial Report under 40 CFR 264.75 or 40 CFR 265.75.4,5 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 <u>Exhibit ES-2</u> for generators and in <u>Exhibit ES-3</u> 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 40 CFR Part 262 – Standards Applicable to Generators of Hazardous Waste.

³ Please consult your State's regulations which may be more stringent and/or broader in scope.

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

⁵ 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 the Biennial Hazardous Waste Report)

<u>Large quantity generators (LQGs)</u> 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.

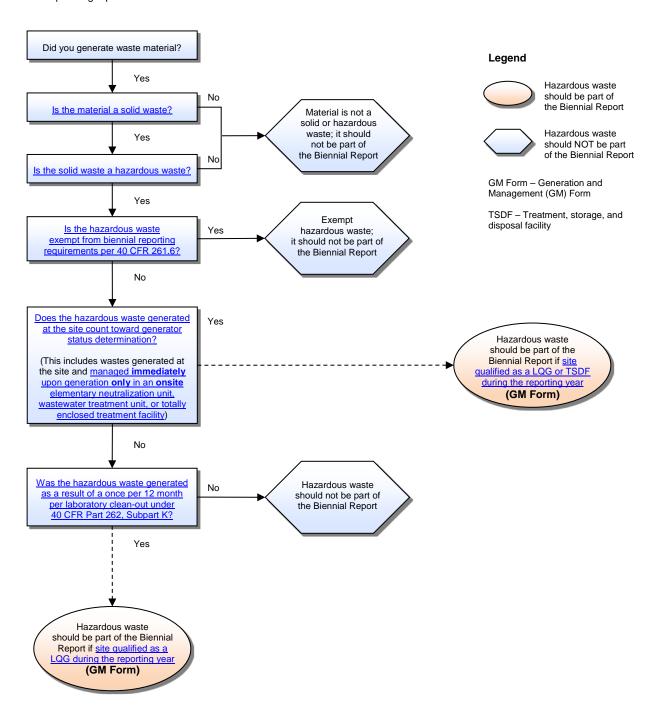
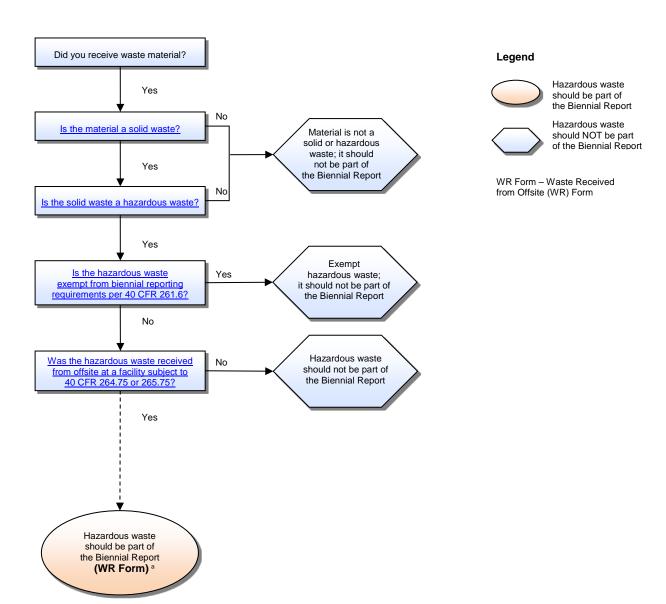


Exhibit ES-3

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 the Biennial Hazardous Waste Report)

<u>Treatment, storage, and disposal facilities (TSDFs)</u> are required to complete and file the Biennial Report or the State's equivalent hazardous waste report. In completing the Biennial Report, <u>TSDFs</u> 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 (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.

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 code⁶ is.
 - If the hazardous waste was managed onsite, was the management method code⁷ 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 <u>definition of a WWTU</u>. 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 <u>WWTU exemption</u>.
 - 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.

⁶ 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.

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;
 - H081 (biological treatment);
 - H100 (physical treatment only), with special interest on waste streams managed through adsorption or air/stream stripping;
 - 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.

Note: To assist implementers (i.e., States and certain EPA Regions) in the identification of hazardous wastewaters managed onsite, EPA developed a Biennial Report Data Quality Report that identifies wastes managed onsite marked to be included in the national report but have wastewater characteristics: "Wastewater Characteristics Report."

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 the findings of EPA's hazardous waste reporting data collection efforts to the public, government agencies, and the regulated community. Data are summarized and communicated via RCRAInfo Web (https://rcrainfo.epa.gov/rcrainfoweb).8

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)?
- Was the site the receiving facility or importer for hazardous waste import shipments approved to enter the U.S. during the reporting year?

facilities. Therefore, the data should be referenced as of the date of the data extraction.

⁸ The data presented on RCRAInfo Web may change as regulators are allowed to make additions, corrections, and/or deletions to their data based on updated data received from

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 <u>discarded material</u> 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 stepwise manner. These steps are summarized in <u>Exhibit 1-1</u>, and discussed in the remainder of this section.

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; (3) accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated; and (4) sham recycled, as explained in 40 CFR 261.2(g). (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.

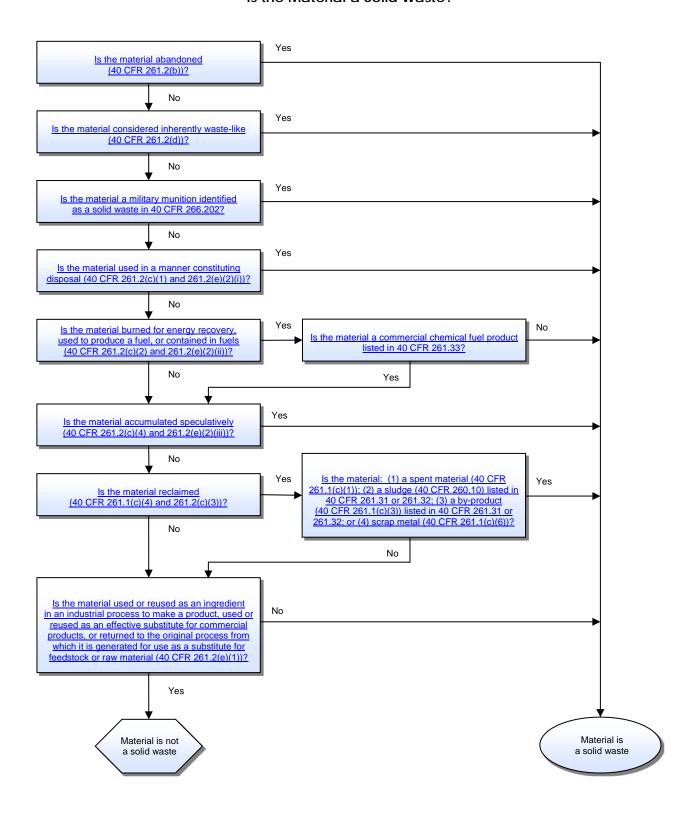
Recycled Material. A material is recycled if it is used or reused (e.g., as an ingredient in a process), reclaimed, or used in certain ways (e.g., burned for energy recovery). Note, however, that whether a particular recycled material is a solid waste depends on the manner in which it is recycled. The 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.

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 place 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)))

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



 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, semisolid, 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	Not a Solid Waste	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	Not a Solid Waste	Solid Waste
Commercial chemical products listed in 40 CFR 261.33	Solid Waste	Solid Waste	Not a Solid Waste	Not a Solid Waste
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 several exclusions from the definition of solid waste, provided certain conditions are met. These exclusions are listed at 40 CFR 261.4(a)(1)-(15) and 261.4(a)(17)-(27).9 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 preserving solutions;
- Coke by-product wastes:
- Excluded scrap metal being recycled;
- Comparable fuels;
- Mineral processing spent materials;

- Spent caustic solutions from petroleum refining liquid treating processes:
- Used cathode ray tubes (CRTs); and
- Hazardous secondary material that is exported from the U.S. and reclaimed at a reclamation facility located in a foreign country.

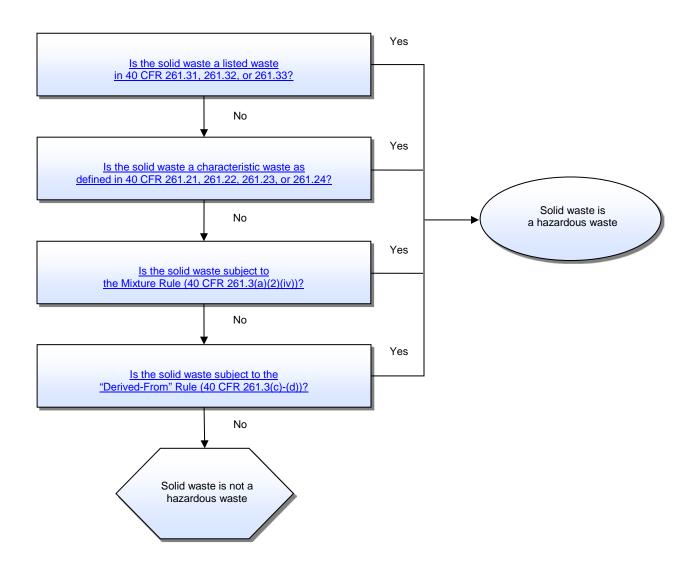
Is the Solid Waste a Hazardous Waste?

(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 <u>Exhibit 1-3</u>, and discussed in the remainder of this section.

 $^{^9\,}$ 40 CFR 261.4(a)(16) is "reserved." Thus, there is no exclusion at this regulatory citation.

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?

Hazardous wastes generated by a SQG or a LQG that are mixed with solid waste are subject to the "Mixture Rule." The "Mixture Rule" states that mixtures of solid waste and listed hazardous waste must be regulated as hazardous waste.

 10 40 CFR 261.4(b)(16) is "reserved." Thus, there is no exclusion at this regulatory citation.

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 several 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)(18), and 261.4(g).¹⁰ Examples of exclusions from the definition of hazardous waste include:

- Household waste:
- Agricultural waste;
- Oil, gas, and geothermal wastes;
- Mining and mineral processing wastes;
- Cement kiln dust;
- Arsenically treated wood or wood products:
- Injected groundwater;

- Spent chlorofluorocarbon refrigerants; and
- Used oil filters.

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 regulatory requirements. including counting and reporting requirements. Examples include: recyclable materials from which precious metals are reclaimed, as specified at 40 CFR 266.70 (40 CFR 261.6(a)(2)(iii)); industrial ethyl alcohol that is reclaimed, unless provided otherwise in an international agreement as specified in 40 CFR 262.58 (40 CFR 261.6(a)(3)(i)); and scrap metal that is not excluded under 40 CFR 261.4(a)(13) (40 CFR 261.6(a)(3)(ii)).

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 very small quantity generator (VSQG), a small quantity generator (SQG), or a large quantity generator (LQG) for that particular month. A generator's category may change from month to month.

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. The regulations stating the procedures to determine whether a generator is a VSQG, a SQG, or a LQG for a particular month are found in 40 CFR 262.13.

<u>Do Not Count the Following Wastes in</u> <u>Determining Generator Status</u>

Pursuant to 40 CFR 262.13, a generator must include (count) all hazardous waste that it generates, except hazardous waste that: 11

- Is exempt from regulation under 40 CFR 261.4(c)-(f), 261.6(a)(3), 261.7(a)(1), or 261.8. (40 CFR 262.13(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 262.13(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 262.13(c)(3))
- Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR Part 279. (40 CFR 262.13(c)(4))
- Is spent lead-acid batteries managed under the requirements of 40 CFR Part 266, Subpart G. (40 CFR 262.13(c)(5))
- Is universal waste managed under 40 CFR 261.9 and 40 CFR Part 273. (40 CFR 262.13(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 262.13(c)(7))

- Is managed as part of an episodic event in compliance with the conditions of 40 CFR Part 262, Subpart L. (40 CFR 262.13(c)(8))
- Is a hazardous waste pharmaceutical, as defined in 40 CFR 266.500, that is subject to or managed in accordance with 40 CFR Part 266, Subpart P or is a hazardous waste pharmaceutical that is also a Drug Enforcement Administration (DEA) controlled substance and is conditionally exempt under 40 CFR 266.506. (40 CFR 262.13(c)(9))

In addition, a facility must not include (count) toward its generator status airbag waste at the airbag waste handler or during transport to an airbag waste collection facility or designated facility (40 CFR 261.4(f)(1)). **Note:** Under the Interim Final Rule on the Safe Management of Recalled Airbags, EPA is exempting airbag waste from RCRA hazardous waste requirements while at the airbag waste handler and during transportation to airbag waste collection facility, provided certain conditions are met. Once collected at the airbag waste collection facility, the airbag waste will be subject to all applicable RCRA hazardous waste requirements.

Avoid Double Counting

All of the following wastes have already been counted when they were initially generated. Thus, to avoid double counting, 40 CFR 262.13(d) states that the following types of waste do not need to be counted when determining generator classification:

- Hazardous waste when it is removed from onsite accumulation, so long as the hazardous waste was previously counted once. (40 CFR 262.13(d)(1))
- Hazardous waste generated by onsite treatment (including reclamation) of the generator's hazardous waste, so long as the hazardous waste that is treated was previously counted once. (40 CFR 262.13(d)(2))
- Hazardous waste spent materials that are generated, reclaimed, and subsequently reused onsite, so long as such spent materials have been previously counted once. (40 CFR 262.13(d)(3))

<u>Groundwater Contaminated by Hazardous</u> Wastes

ln 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 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 example, 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 laboratory clean-out hazardous wastes towards its generator status, a Biennial Report is required for ALL hazardous waste, including laboratory clean-out hazardous waste. 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 (TSDF 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

Pursuant to 40 CFR 260.10, a site is a LQG if the site met any of the following criteria:

- The site generated, in any single calendar month, greater than or equal to 1,000 kilograms (kg) (2,200 pounds [lbs]) of non-acute hazardous waste; or
- The site generated, in any single calendar month, greater than 1 kg (2.2 lbs) of acute hazardous waste listed in 40 CFR 261.31 or 261.33(e); or

The site generated, in any single calendar month, greater than 100 kg (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in 40 CFR 261.31 or 261.33(e).

Per 40 CFR 262.41, a generator who is an LQG for at least one month of a reporting year who treats, stores, or disposes of hazardous waste on site and/or ships any hazardous waste off-site to a TSDF within the U.S. must complete and submit the Biennial Report. In their Biennial Report, LQGs must report all of the hazardous waste they generate for the entire reporting year, not just the month(s) the generator was an LQG.¹²

<u>Data Quality Checks and "Include in National Report" Flags</u>

In submitting their Biennial Report GM Form data to EPA, implementers (i.e., Authorized States and certain 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 to determine which sites and wastes should be For information on data quality included. 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.

Department of Environmental Protection. EPA would like to acknowledge and thank both of them for their contribution to this document.

EPA, "Hazardous Waste Generator Improvements Rule," 81 FR 85780; November 28, 2016.

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

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 (TSDF 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 40 CFR 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 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.

<u>Data Quality Checks and "Include in National Report" Flags</u>

In submitting their Biennial Report WR Form data to EPA, implementers (e.g., States and certain 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 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 Site the Receiving Facility or Importer for Hazardous Waste Import Shipments Approved to Enter the U.S. during the Reporting Year?

Under the Federal requirements in 40 CFR 264.75 and 40 CFR 265.75 for TSDFs and/or the Federal requirements in 40 CFR 262.41 for importers complying with generator requirements (or equivalent Authorized State requirements), TSDFs and importers that are LQGs must report on imported hazardous waste as part of their Biennial Report submittals to their respective State agencies or Regional EPA offices (if the State agency is not authorized to implement the Biennial Report program).

When calculating the total quantity of hazardous waste generated in a month, importers should add the quantity of hazardous waste imported during the calendar month to any hazardous waste generated at the importer's physical site during that calendar month. Under the RCRA regulations, the date an import of hazardous waste entered the country is considered the date the waste was "generated." All hazardous waste import shipments listing the importer's EPA ID number on the RCRA hazardous waste manifest should be included as part of the total monthly quantity, regardless of the port of entry or border crossing used.

Owners/operators of TSDFs receiving hazardous waste import shipments must report such hazardous waste import shipments using the WR Form, as appropriate. If the facility also was acting as the importer of record, the facility assumed generator requirements for those import shipments and also must report the import shipments as generated hazardous wastes from a foreign source using the GM Form if the facility's total monthly quantity met the LQG threshold for any month during the reporting year. An EPA-acceptable alternative for the facility to meet generator biennial reporting requirements for those import shipments would be for the

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.

facility to add a statement to the "Comment" field of the WR Form for those import shipments noting that the TSDF was the importer of record for the listed import shipment(s). 16

For additional information on reporting hazardous waste import shipments, refer to Appendix G of this document.

Note: To assist implementers (i.e., States and certain EPA Regions) in the identification of hazardous import shipments, EPA developed two Biennial Report Data Quality Reports that show the waste streams imported from a foreign country, as reported on GM and WR Forms: (1) "Hazardous Waste Imports Report (Detail)" and (2) "Hazardous Waste Imports Report (Summary)."

¹⁶ Please consult your State agency on how best to meet the generator biennial reporting requirements.

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 262.13(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 compliance amended. and/or 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 40 CFR 265.1(c)(10), owners and operators 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 262.13(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): ¹⁷

- (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 262.13(c)(2))

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

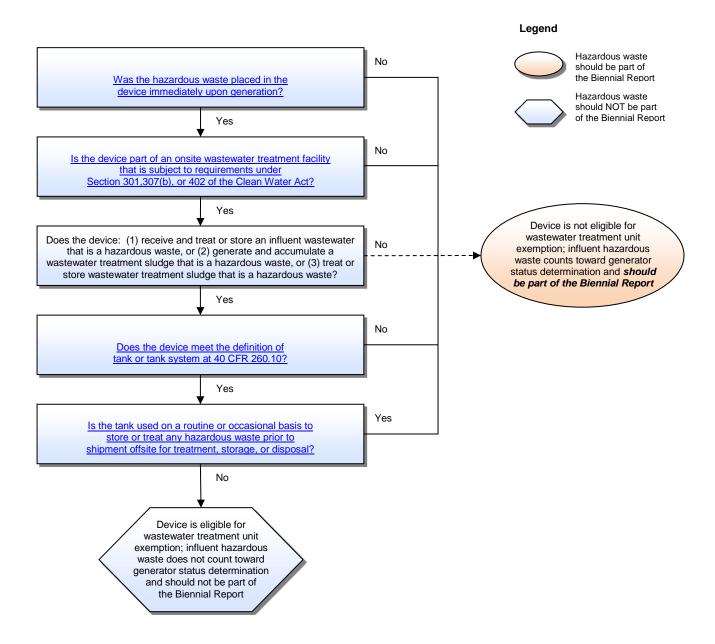
What is a Wastewater Treatment Unit?

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.

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. 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 industry-specific. technology-based contain 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 A permit applicant must provide discharge. 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.

Note: EPA's "Enforcement and Compliance History Online" (or "ECHO") Web site provides information on NPDES permitted facilities.

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 <u>40 CFR 260.10</u>, as a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

What is the Wastewater Treatment Unit Exemption?

<u>Do Not to Count Wastes Managed in</u> Exempt WWTU

Under 40 CFR 262.13(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." 18

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.

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 <u>CWA Section 307(b)</u>.

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. ^{19, 20}

For **examples**, refer to Appendix C of this document.

¹⁸ 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 through RCRA Online at: https://rcrapublic.epa.gov/rcraonline/index.xhtml, last accessed January 9, 2020.

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

²⁰ 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 $\underline{\mathsf{Appendix}}\ \mathsf{C}$ of this document.

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INFORMATION RESOURCES

(Go to Table of Contents)

Recent Rulemakings

Hazardous Waste Export-Import Revisions Final Rule

(Published in the *Federal Register* on December 21, 2016; effective on December 31, 2016)

- "Hazardous Waste Export-Import Revisions Final Rule" Web page at: https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-export-import-revisions, last accessed on January 9, 2020.
- "Frequent Questions about the Hazardous Waste Export-Import Revisions Final Rule" Web page at: https://www.epa.gov/hwgenerators/frequent-questions-about-hazardous-waste-export-import-revisions-final-rule, last accessed on January 9, 2020.
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- "Federal Register Notice: Compliance Date for Automated Export System (AES) Filing" Web page at: https://www.epa.gov/hwgenerators/federal-register-notice-compliance-date-automated-export-system-aes-filing, last accessed on January 9, 2020.

 U.S. Environmental Protection Agency, Office of Inspector General. EPA Does Not Effectively Control or Monitor Imports of Hazardous Waste, Report No. 15-P-0172, July 6, 2015. Available at: https://www.epa.gov/office-inspector-general/report-epa-does-not-effectively-control-or-monitor-imports-hazardous-waste, last accessed on January 9, 2020.

Hazardous Waste Generator Improvements Final Rule

(Published in the Federal Register on December 21, 2016; effective on May 30, 2017)

- "Hazardous Waste Generator Improvements Final Rule" Web page at: https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements, last accessed on January 9, 2020.
- "Fact Sheet About the Hazardous Waste Generator Improvements Final Rule" Web page at: https://www.epa.gov/hwgenerators/fact-sheet-about-hazardous-waste-generator-improvements-final-rule, last accessed on January 9, 2020.
- "Frequent Questions about the Hazardous Waste Generator Improvements Final Rule" Web page at: https://www.epa.gov/hwgenerators/frequent-questions-about-hazardous-waste-generator-improvements-final-rule, last accessed on January 9, 2020.
- "Where is the Hazardous Waste Generator Improvements Rule in Effect?" Web site at: https://www.epa.gov/hwgenerators/where-hazardous-waste-generator-improvements-rule-effect, last accessed on January 9, 2020.
- Hazardous Waste Generator Improvements Final Rule Regulatory Crosswalk. Available as Appedix H to this document.

2018 Definition of Solid Waste (DSW) Final Rule – Response to Court Vacatur

(Published in the *Federal Register* on May 30, 2018; effective on May 30, 2018)

- "Final Rule: 2018 Definition of Solid Waste (DSW) Response to Court Vacatur" Web page at: https://www.epa.gov/hw/final-rule-2018-definition-solid-waste-dsw-response-court-vacatur, last accessed on January 9, 2020.
- "Where is the 2018 Definition of Solid Waste Rule in Effect?" Web page at: https://www.epa.gov/hw/where-2018-definition-solid-waste-rule-effect, last accessed on January 9, 2020.

Interim Final Rule: Safe Management of Recalled Airbags

(Published in the *Federal Register* on November 30, 2018; effective on November 30, 2018)

- "Interim Final Rule: Safe Management of Recalled Airbags" Web page at: https://www.epa.gov/hw/interim-final-rule-safe-management-recalled-airbags, last accessed on January 9, 2020.
- "Frequent Questions About the Regulation of Airbag Waste" Web page at: https://www.epa.gov/hw/frequent-questions-about-regulation-airbag-waste, last accessed on January 9, 2020.
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(Published in the *Federal Register* on February 22, 2019; effective on August 21, 2019)

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- "Frequent Questions about the Management Standards for Hazardous Waste Pharmaceuticals and Amendment to the P075 Listing for Nicotine Final Rule" Web page at: https://www.epa.gov/hwgenerators/frequent-questions-about-management-standards-hazardous-waste-pharmaceuticals-and, last accessed on January 9, 2020.
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(Published in the Federal Register on December 9, 2019; effective on February 7, 2020)

"Increasing Recycling: Adding Aerosol Cans to the Universal Waste Regulations" Web page at:
 https://www.epa.gov/hw/increasing-recycling-adding-aerosol-cans-universal-waste-regulations, last accessed on January 9, 2020.

Determining Whether a Waste Should Be Part of the Biennial Report

Hazardous Wastes (in general)

 "Hazardous Waste" Web page at: https://www.epa.gov/hw, last accessed on January 9, 2020.

Hazardous Wastewaters

- "Summary of the Clean Water Act" Web page at: https://www.epa.gov/laws-regulations/summary-clean-water-act, last accessed on January 9, 2020.
- 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, "Guidance on Wastewater Treatment," RCRA Online Number 14472. Available through RCRA Online at: https://rcrapublic.epa.gov/rcraonline/index.x httml, last accessed January 9, 2020.
- January 16, 1992 Letter from Sylvia Lowrance, Director of EPA's Office of Solid Waste, to Thomas Cervino, Colonial Pipeline Company, "Exemption From Permitting Requirements For Waste Water Treatment Units," RCRA Online Number 13526. Available through RCRA Online at: https://rcrapublic.epa.gov/rcraonline/index.x httml, last accessed January 9, 2020.

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- 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, "Request for Guidance/Clarification of Wastewater Treatment Unit Definition," RCRA Online Number 11050. Available through RCRA Online at: https://rcrapublic.epa.gov/rcraonline/index.x httml, last accessed January 9, 2020.
- 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, "Wastewater Treatment Unit Exemption," RCRA Online Number 11020. Available through RCRA Online at: https://rcrapublic.epa.gov/rcraonline/index.x httml, last accessed January 9, 2020.

Groundwater Contaminated by Hazardous Wastes

"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 Number 14291. Available through RCRA Online at:

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Laboratory Clean-Out Hazardous Wastes

- "Regulations for Hazardous Waste
 Generated at Academic Laboratories" Web
 page at:
 https://www.epa.gov/hwgenerators/regulatio
 ns-hazardous-waste-generated-academiclaboratories, last accessed on
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- "Managing Hazardous Waste at Academic Laboratories Rulemaking" Web page at: https://www.epa.gov/hwgenerators/managing-hazardous-waste-academic-laboratories-rulemaking, last accessed on January 9, 2020.

- "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 at: https://www.epa.gov/hwgenerators/managing-hazardous-waste-academic-laboratories-rulemaking, last accessed on January 9, 2020.
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- "Frequent Questions About Managing Hazardous Waste at Academic Laboratories" Web page at: https://www.epa.gov/hwgenerators/frequent-questions-about-managing-hazardous-waste-academic-laboratories, last accessed on January 9, 2020.
- "Where is the Managing Hazardous Waste at Academic Laboratories Rule in Effect?" Web page at: https://www.epa.gov/hwgenerators/where-managing-hazardous-waste-academic-laboratories-rule-effect, last accessed on January 9, 2020.

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 (TSDF 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 hazardous by 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?
- How should contaminated groundwater be reported in the Biennial Report forms?

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? 21

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).

Online at: https://rcrapublic.epa.gov/rcraonline/index.xhtml, last accessed January 9, 2020.

^{21 &}quot;Management of Remediation Waste Under RCRA;" EPA530-F-98-026; October 14, 1998; pages 9-11; RCRA Online Document Number 14291. Available through RCRA

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 RCRA regulations. However, contaminated groundwaters can become subject to regulation under RCRA if they "contain" hazardous waste. EPA generally considers contaminated groundwaters to contain hazardous waste: (1) when they exhibit a characteristic of hazardous waste; or, (2) when they are contaminated with concentrations of hazardous constituents from listed hazardous waste that are above health-based levels.

If contaminated groundwaters contain hazardous waste, they are subject to all applicable RCRA requirements until they no longer contain hazardous waste. The determination that any given volume of contaminated groundwaters does not contain hazardous waste is called a "contained-in determination."

In the case of contaminated groundwaters that exhibit a characteristic of hazardous waste, the contaminated groundwaters are considered to "contain" hazardous waste for as long as they exhibit a characteristic. Once the characteristic is eliminated (e.g., through treatment), the contaminated groundwaters are no longer considered to "contain" hazardous waste.

In the case of contaminated groundwaters that are contaminated by listed hazardous waste, current EPA guidance recommends that contained-in determinations be made based on site-specific, health-based standards.

In certain circumstances, the RCRA land disposal restrictions (LDRs) will continue to apply to contaminated groundwaters that have been determined not to contain hazardous waste. For example, this is the case when contaminated groundwaters contain hazardous waste when they are first generated (i.e., removed from the land, or area of contamination) and are subsequently determined to no longer contain hazardous waste (e.g., after treatment), but still contain hazardous constituents at concentrations above LDR treatment standards.

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 at 40 CFR 261.3(a)(2)(iv) or the "Derived-From" Rule at 40 CFR 261.3(c)-(d)).
- 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. ²²

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 (i.e., a listed hazardous waste), or "contains" leachate, EPA Regions or Authorized States should make a site-specific determination.

How should contaminated groundwater be reported in the Biennial Report forms?

When reporting groundwater contaminated by hazardous waste in the Biennial Report, observe the following conventions:

- Enter "0" in the GM Form Item 1.H (Quantity Generated/UOM and Density). Explain in Item 4 (Comments) that it is groundwater regulated via the Contained-In Policy, not a hazardous waste that was generated on-site. Exhibit A-1 provides an example of how to report groundwater contaminated by hazardous waste.
- Report quantities managed on-site (GM Form, Item 2, On-site Process Systems 1 and 2); quantities shipped off-site for management (GM Form, Item 3); and quantities received from off-site and managed on-site (WR Form, Item G).

Online at: https://rcrapublic.epa.gov/rcraonline/index.xhtml, last accessed January 9, 2020.

[&]quot;Management of Remediation Waste Under RCRA;" EPA530-F-98-026; October 14, 1998; pages 9-11; RCRA Online Document Number 14291. Available through RCRA

Exhibit A-1 Example of How to Report Groundwater Contaminated by Hazardous Waste

	United States E HAZARDOUS WA WASTE GENERATIO	STE RE	PORT 20	19 (report	ing cycle)	AND THE PROTECTION
Was	ste Characteristics					
	A. Waste Description					
	B. EPA Hazardous Waste Code(s)					
	C. State Hazardous Maste Code(s) Enter "0" in the GM Form – Ite (Quantity Generated/UOM and		ment Met	hod (G25)	Country Cod	e (G62)
	E. Form Code	F. Wast	te Minimiza	tion Code	G. Radioacti	ve Mixed Y N
	H. Quantity	0 UOM	Den	sity	<u>'</u>	☐ lbs/gal ☐ sg
Item	ments Groundwater regulated via the Con n 4 (Comments) that it is after regulated via the	ntained-l	n Policy,	not a hazardo	us waste that wa	s generated on-site.

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 (TSDF Flowchart) / Go to Table of Contents)

40 CFR Part 262, Subpart K ("Alternative for Hazardous Requirements 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 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).²³

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

²³ Please consult your State's regulations which may be more stringent and/or broader in scope than Federal regulations.

person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical 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 12 months; or
- Remove containers of unwanted material from each laboratory within 12 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 cleanout. 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 Ulisted 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 non-acute hazardous waste (i.e., the very small quantity generator [VSQG] limits as defined in 40 CFR 260.10), 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 very small quantity generator (VSQG) 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 cleanout 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 Source Code G17 (i.e., Subpart K laboratory waste clean-out).

<u>Exhibit B-1</u> 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?

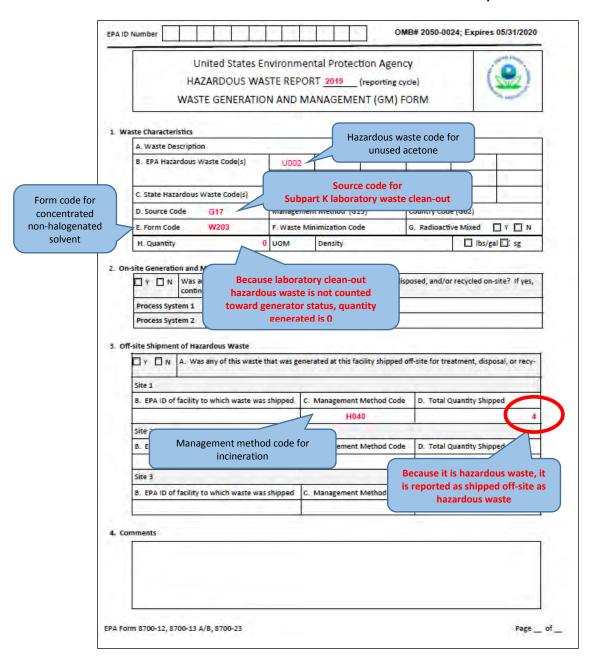
In reporting laboratory clean-out waste, LQGs have to use Source Code G17 (i.e., Subpart K laboratory waste clean-out) to report unused commercial chemical products and unused characteristic hazardous wastes that are not counted toward generator status determination because they are from a laboratory 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.

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

	- To-6-1 - 1	ovironmental Prote STE REPORT 2019 N AND MANAGEM	(reporting cy	cle)	(9
	Waste Characteristics		Hazardous	waste code	for	
	A. Waste Description		spent halog	enated solv	ents	
	B. EPA Hazardous Waste Code(s)	F002				
	C. State Hazardous Waste Code(s)	Source code laboratory analyti				
orm code for	D. Source Code G22	management method (Country Code	(G62)	
oncentrated	E. Form Code W202	F. Waste Minimization C	ode	G. Radioactiv	e Mixed	YDN
genated solvent	H. Quantity 13	UOM Density			☐ lbs/gal	□1 sg
	Off-site Shipment of Hazardous Waste N A. Was any of this waste the Site 1	hat was generated at this	facility shipped o	off-site for tre	atment, dispo	sal, or recy-
	B. EPA ID of facility to which waste was	shipped C. Managemer	t Method Code	D. Total Q	uantity Shipp	ed
		H	040			13
	B. EPA ID of Incinera	Pr Pr	t Method Code	D. Total O	uantity Shipp	ed
	Site 3					
	B. EPA ID of facility to which waste was	shipped C. Managemer	t Method Code	D. Total O	uantity Shipp	ed
	4. Comments	-2				

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



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 one-per-12-month laboratory clean-out under 40 CFR Part 262, Subpart K (i.e., the Academic Laboratory Rule).

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APPENDIX C: EXAMPLES ON HOW TO COMPLETE BIENNIAL REPORT FORMS

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

This appendix provides examples on how to complete Biennial Report forms.²⁴

Example 1:

Wastes Managed in 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).
- Hazardous waste managed onsite immediately upon generation in a tank system using Management Method Code H135 (discharge to sewer/publicly owned treatment works [POTW] or National Pollutant Discharge Elimination System [NPDES] with prior management).
- Wastewater treatment unit (WWTU) 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

Based on the information provided, the hazardous waste was managed **immediately upon generation** in an **onsite tank system**

 $^{\rm 24}$ Examples presented in this appendix were provided by States and EPA Regions.

subject to an NPDES permit under CWA Section 402. Thus, 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. For additional information, refer to Part 2: Determining Whether a Hazardous Wastewater Should Be Part of the Biennial Report section of this document.

Note: EPA's "<u>Enforcement and Compliance</u> <u>History Online</u>" (or "ECHO") Web site provides information on NPDES permitted facilities.

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 with prior management).

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 the information provided, the hazardous waste was **NOT managed immediately upon generation** in a WWTU. As a result, this waste should be counted toward generator status determination and be part of the Biennial Report. For additional information, refer to Part 2: Determining Whether a Hazardous Wastewater Should Be Part of the Biennial Report section of this document.

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 WWTU exemption. The rest is decharacterized and disposed as nonhazardous waste in Class I disposal well at the site." 25
- Management of the waste using Management Method Code H135 (discharge to sewer/POTW or NPDES with prior management) and Management Method Code H134 (deepwell or underground injection).

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 the information provided, the 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: Wastes Managed in 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).
- Hazardous waste managed onsite immediately upon generation in a tank system using Management Method Code H135 (discharge to sewer/POTW or NPDES with prior management).
- WWTU 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?

(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.

²⁵ 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

What value should be assigned to the "Include in National Report" flag?

Answers

Based on the information provided, the hazardous waste was managed immediately upon generation in an onsite tank system subject to the pretreatment requirements of Section 307(b) of the Clean Water Act (CWA). Thus, 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. For additional information, refer to Part 2: Determining Whether a Hazardous Wastewater Should Be Part of the Biennial Report section of this document.

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 5: Wastes Discharged to Sewer/POTW or NPDES

Scenario:

- Acidic wastewater (D002) discharged to the acid sludge tank treatment system.
- The waste is treated onsite immediately upon generation in a WWTU (stated in the comment field).
- Management of the waste using Management Method Code H135 (discharge to sewer/POTW or NPDES with prior management).

Questions

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

Answers

The hazardous waste was managed immediately upon generation in a tank system that is part of a WWTU subject to regulation

under either Section 402 (i.e., NPDES) permitting program or Section 307(b) of the CWA (i.e., the national pretreatment program for facilities that discharge to POTWs). As a result, the State excludes the waste from its Biennial Report submission 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. For additional information, refer to Part 2: Determining Whether a Hazardous Wastewater Should Be Part of the Biennial Report section of this document.

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 6:

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

Scenario:

- Wastewater was pumped through piping connected from the boiler to an interconnected 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 from a closed pipe system into an NPDES permitted wastewater treatment unit where undergoes biological treatment?

Answer

The wastewater was managed immediately upon generation in a totally enclosed treatment facility. Therefore, it 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 262.13(c)(2)). For additional information, refer to Part 2: Determining Whether a Hazardous Wastewater Should Be Part of the Biennial Report section of this document.

The State should mark "N" (No) for the "Include in National Report" flag.

Example 7: 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

The original generator lists the first receiver and Management Method Code H141. That is, the spent solvent generator needs to fill in the 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. In other words, the permitted one-year 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 8: Wastes Sent to Storage, Bulking, and/or Transfer Facilities

Scenario:

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

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/UOM and Density)?

Answers

The commercial TSDF that received the waste from offsite generators completes a WR Form using Management Method Code H141. When the commercial TSDF subsequently ships the waste offsite to the other TSDF, the initial TSDF uses the GM Form (Source Code G61 and zero for generation quantity) and would report the applicable management method code in GM Form, Section 3 (e.g., H061 if fuel blending; H050 if energy recovery), that best describes the way in which the waste was managed at the receiving facility.

Example 9: 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 10: 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 tenant 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 tenant) 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 11: 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 is responsible for submitting and loading facilities' Biennial Report to RCRAInfo.

Example 12: 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 wasteif 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, 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.

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 certain 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:²⁶

- 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. <u>Treatment, storage, and disposal facility</u> (TSDF) reports;
- 6. Foreign country handlers;
- 7. Foreign imports;
- 8. "Include in National Report" flag; and
- 9. 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 the RCRAInfo File Specification Guide: Hazardous Waste Report Submissions document, available at https://rcrainfo.epa.gov/rcrainfoweb/action/main-menu/view).
- If submitted on paper, whether the information is legible for data entry personnel.
- Whether the various codes used are valid.
- EPA ID number is in RCRAInfo's Handler Module.
- Compare generator status against GM Forms.
- Waste codes are required, if the site is a generator.
- If a site checked "Y" in for "Treater, Storer, or Disposer of Hazardous Waste," verify against the "Operating TSDF Universe" indicator in the "HREPORT_UNIV5" 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 From is correct

acknowledge and thank both of them for their contribution to this document.

²⁶ 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

If a site marked "Yes" for "Large Quantity Handler of Universal Waste," verify against waste quantities reported in the Biennial Report forms. Per 40 CFR 273.9, a "Large Quantity Handler of Universal Waste" means a universal waste handler who accumulates 5,000 kilograms (11,023 pounds) or more total of universal waste at any time.

Data Quality Checks for the GM Form

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

- Required fields are filled in (see the RCRAInfo File Specification Guide: Hazardous Waste Report Submissions document, available at https://rcrainfo.epa.gov/rcrainfoweb/action/main-menu/view).
- 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" (no waste minimization efforts were implemented for this waste) is the default.
 - For "A" (continued initiatives to reduce quantity and/or toxicity of this waste), "B" (continued initiatives to recycle the waste either onsite or offsite), "C" (implemented new initiatives to reduce quantity and/or toxicity of this waste), "D" (implemented new initiatives to recycle the waste either on-site or off-site) and "N" (waste minimization efforts found to be

The definition of a pharmaceutical includes drugs for human or animal use, including prescription and over-the-counter pharmaceuticals, dietary supplements, homeopathic drugs, compounded drugs, investigational new drugs, as well

- economically or technically impracticable), additional information in the Comments section is recommended. Refer to Exhibit D-1.
- 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. Acute hazardous wastes include all P-listed wastes at 40 CFR 261.33(e) and these six F-listed wastes: F020, F021, F022, F023, F026, and F027 listed at 40 CFR 261.31. Acute hazardous wastes are subject to more stringent generator accumulation requirements than other hazardous wastes.

In the example below, the waste is a lab pack represented by EPA hazardous waste code "P030" (i.e., cyanides [soluble cyanide salts], not otherwise specified), an acute hazardous waste code. Therefore, W004 is the correct form code.

Handler	Waste Description	Form Code	Federal Waste Codes
Facility01, West Virginia	HAZARDOUS WASTE, SOLID	W004	D003P030

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.

In the example below, the waste is a lab pack that is NOT represented by an acute EPA hazardous waste code. Therefore, W001 is the correct form code.

Handler	Waste Description	Form Code	Federal Waste Codes
Facility02,	POTASSIUM	W001	D002
Arkansas	HYDROXIDE		

 For pharmaceutical wastes²⁷, Form Code "W005" supersedes lab pack Form Codes "W001" or "W004."

as nicotine e-liquids packaged for retail sale and electronic nicotine delivery systems (e.g., e-cigarette or vaping pen).

If the form code is "W006" (i.e., airbag waste [airbag modules or airbag inflators managed as hazardous waste]), then the waste must be airbag waste. The table below shows an example of the use of Form Code W006.

Handler	Waste Description	Form Code	Federal Waste Codes
Facility03, Florida	AIRBAG INFLATORS	W006	D003

- The source code should be "G11" (discarding off-specification, out-of-date, and/or unused chemicals or products) for off-spec or out-ofdate waste.
- If the source code is "G17" (Subpart K laboratory waste clean-out), then the quantity generated must be zero (0) because the facility has opted into the Subpart K Academic Laboratory Waste Rule. Refer to Exhibit D-1.
- If the source code is "G61" (received from offsite for storage/bulking and transfer off-site for treatment or disposal), then the quantity generated should be zero (0) because it was transferred waste. Refer to Exhibit D-1.
- If the source code is "G62" (hazardous waste received from a foreign country), the site must provide the Country Code for the foreign country from which the hazardous waste was received. Refer to Appendix I for the list of Biennial Report Country Codes.
- The source code should not be G63-G75 because these source codes were inactivated, starting with report cycle 2019.

- If the source code is "G25" (treatment, disposal, or recycling of hazardous wastes), the site must provide a management method code for the waste stream. The management method code cannot be "H141" (the site receiving this waste stored/bulked and transferred the waste with no reclamation, recovery, destruction, treatment, or disposal at that site). Refer to Exhibit D-1.
- If the source code is NOT equal to "G25" (treatment, disposal, or recycling of hazardous wastes), then the waste stream should not have a management method code. Refer to Exhibit D-1.
- If reporting still bottoms from recycling, did they check "Y" for "Recycler of Hazardous Waste" on the Site ID Form?
- For cleanup wastes (i.e., Source Codes "G41" to "G49"), form codes often are "W301" (soil) or "W512" (sediment).

Exhibit D-1 Data Quality Checks for the GM Form: Section 1 – Waste Characteristics

HAZARDOUS W	Environmental Protection Agency ASTE REPORT (reporting cycl ON AND MANAGEMENT (GM) FO	e)	PROTECTION OF THE PROTECTION O
te Characteristics			
A. waste Description	Source Code G25 indicates that this system described on a separate GM or		
B. EPA Hazardous Waste Code(s)	waste stream. The management met and transferred the waste with no re	hod code cannot be H141 (th	e site receiving this waste
B. EPA Hazardous Waste Code(s) C. State Hazardous Waste Code(s)		hod code cannot be H141 (th clamation, recovery, destruct	e site receiving this waste : cion, treatment, or disposa
	and transferred the waste with no re If the source code is NOT equal to "G2:	hod code cannot be H141 (th clamation, recovery, destruct	e site receiving this waste : cion, treatment, or disposa
C. State Hazardous Waste Code(s)	and transferred the waste with no re If the source code is NOT equal to "G2." Management Method (G25)	hod code cannot be H141 (th clamation, recovery, destruct 5," then the waste stream sho	e site receiving this waste : cion, treatment, or disposa

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? The management method code cannot be "H141" (the site receiving this waste stored/bulked and transferred the waste with no reclamation, recovery, destruction, treatment, or disposal at that site). Refer to Exhibit D-2.
- Are the applicable Site ID Form activities all marked? For example, was "Recycler of Hazardous Waste" marked on the Site ID Form when there is on-site solvent recovery or a residual Source Code G25/Management Method Code H020 GM Form?
- 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 of the receiving facility (Receiver ID) is in RCRAInfo's Handler Module, the receiving site is a hazardous waste receiver (and not a transporter only or a less-than-10-day transfer facility where waste storage is incidental to transportation), and that the management method code is a method that the receiving facility conducts. Refer to Exhibit D-3.

Note: To assist implementers (i.e., States and certain EPA Regions) in ensuring that the management method code reported in Section 3 of the GM Form is a method that receiving facility conducts, developed a Biennial Report Data Quality Report that compares the management methods reported in a facility's Biennial Report to the RCRAInfo operating permits for Treatment, Storage and Disposal Facilities in "Verification the State: of Treatment/Storage/Disposal Permits Report."

- 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.
- Are the applicable Site ID Form activities all marked?
- Total number of GM Form pages with shipment data represented by Source Code G61 should roughly correspond to the total number of WR Forms with Management Method Code H141.

Exhibit D-2 Data Quality Checks for the GM Form: Section 2 – On-Site Generation and Management of Hazardous Waste

	ed States Environmental Pro	1.
	DOUS WASTE REPORT SENERATION AND MANAGE	1
site Generation and	Management of Hazardous Waste	
	iny of this waste that was generated at thi nue to On-site Process System 1.	is facility treated, disposed, and/or recycled on-site?
Assessment Assessment Assessment	Management Method Code	Quantity
Process System 1		
Process System 1 Process System 2	Management Method Code	Quantity

Exhibit D-3
Data Quality Checks for the GM Form:
Section 3 – Off-Site Shipment of Hazardous Waste

generated at this facility shipped of	f-site for treatment, disposal, or r
generated at this facility shipped of	f-site for treatment, disposal, or re
	Carried and American Street Co.
C. Management Method Code	D. Total Quantity Shipped
C. Management Method Code	D. Total Quantity Shipped
C. Management Method Code	D. Total Quantity Shipped
Do report waste shipped via tr	ransfer facility.
however, do not list on a G less-than-10-day transfer facilit	ty where waste
	C. Management Method Code C. Management Method Code Do report waste shipped via tr

Data Quality Checks for the WR Form

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

- Required fields are filled in (see "RCRAInfo File Specification Guide: Hazardous Waste Report Submissions," available at https://rcrainfo.epa.gov/rcrainfoweb/action/main-menu/view).
- 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 (Shipper ID) appears to be a permanent one, is it in RCRAInfo's Handler Module, and does it start with a State code?
- Is the management method code one that this facility conducts?
- 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. Acute hazardous wastes include all P-listed wastes at 40 CFR 261.33(e) and these six F-listed wastes: F020, F021, F022, F023, F026, and F027 listed at 40 CFR 261.31. Acute hazardous wastes are subject to more stringent generator accumulation requirements than other hazardous wastes.

In the example below, the waste is a lab pack represented by EPA hazardous waste code "P003" (i.e., acrolein), an acute hazardous waste code. Therefore, W004 is the correct form code.

Handler	Waste Description	Form Code	Federal Waste Codes
Facility04, North	ACROLEIN	W004	D001P003
Carolina	STABILIZED		

The definition of a pharmaceutical includes drugs for human or animal use, including prescription and over-thecounter pharmaceuticals, dietary supplements, homeopathic drugs, compounded drugs, investigational new drugs, as well 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.

In the example below, the waste is a lab pack that is NOT represented by an acute EPA hazardous waste code. Therefore, W001 is the correct form code.

Handler	Waste Description	Waste Form	Federal Waste Codes
Facility05, New Jersey	PACKED LAB CHEMICALS	W001	D001D003D011F003

- For pharmaceutical wastes²⁸, Form Code "W005" supersedes lab pack Form Codes "W001" or "W004."
- If the form code is "W006" (i.e., airbag waste [airbag modules or airbag inflators managed as hazardous waste]), then the waste must be airbag waste. The table below shows an example of the use of Form Code W006.

Handler	Waste Description	Form Code	Federal Waste Codes
Facility06,	AIRBAG	W006	D003
California	INFLATORS		

- Page number and sub-page number combination should be unique.
- Received quantity cannot be zero.
- Receiver should not list self as a customer.
- Optional Verify whether in-State very small quantity generator (VSQG) 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?

as nicotine e-liquids packaged for retail sale and electronic nicotine delivery systems (e.g., e-cigarette or vaping pen).

- 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 (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 (the site receiving this waste stored/bulked and transferred the waste with no reclamation, recovery, destruction, treatment, or disposal at that site)?
- Does the sum of GM Form fuel blended waste shipments reasonably correspond with WR Form "H061" (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:
 - An ID from the "Foreign Site Identification Number List" in the Hazardous Waste Report Instructions and Form booklet [EPA Form 8700-13 A/B].
 - "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 Foreign Imports

Following is a list of items to check for foreign imports:

GM Forms

- Whether sites that are the generator of record and the U.S. Importer completed a GM Form.
- Appropriate use of source codes. Foreign imports must be represented by Source Code G62 (received hazardous waste from a foreign country) and the Country Code for the foreign country from which the hazardous waste was received must be specified in Item 1.D of the GM Form. Refer to Appendix I for the list of Biennial Report Country Codes.
- If information on the Import Notification and other foreign generator information was included in the Comment field.

WR Forms

- Whether sites that received hazardous waste directly from a generator at a site located in a foreign country completed a WR Form for the waste treated, recovered, or disposed at the site.
- If owners and operators of TSDFs that received hazardous waste import shipments reported such hazardous waste import shipments using the WR Form, as appropriate.
 - If a facility was also acting as the importer of record, the facility assumed generator requirements for those import shipments and must also report the import shipments as generated hazardous wastes from a foreign source using the GM Form if the facility's total monthly quantity met the LQG threshold for any month during the reporting year.
 - An EPA-acceptable alternative for the facility to meet generator biennial reporting requirements for those import shipments would be for the facility to add a statement to the "Comment" field of the WR Form for those import shipments noting that the TSDF was the importer of record for the listed import shipment(s).

For additional information on reporting hazardous waste import shipments, refer to Appendix G of this document.

Note: On July 6, 2015, EPA's Office of Inspector General (OIG) issued a report titled "EPA does not effectively control or monitor imports of hazardous waste." ²⁹ EPA took action to address issues identified in the report by:

- Promulgating the Hazardous Waste Export-Import Revisions Final Rule to improve the tracking of imports of hazardous waste.
- EPA also has developed Biennial Report Data Quality Reports in RCRAInfo that show information on hazardous wastes imported from a foreign country, as reported in GM and WR Forms: (1) "Hazardous Waste Imports Report (Detail)" and (2) "Hazardous Waste Imports Report (Summary)." These

RCRAInfo reports should facilitate review of Biennial Report data by implementers.

 Finally, the e-Manifest program also will enhance EPA's ability to track imports.

The above efforts are expected to advance EPA's work in the hazardous waste imports area by making review and analysis of data much more efficient.

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 Federal 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).

Refer to <u>Appendix E</u> for additional information on setting the "Include in National Report" flags.

https://www.epa.gov/sites/production/files/2015-

09/documents/20150706-15-p-0172.pdf, last accessed on December 9, 2019.

²⁹ EPA OIG, "EPA Does Not Effectively Control or Monitor Imports of Hazardous Waste," Report No. 15-P-0172, July 6, 2015. Available at

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. The table below presents examples of discrepancies of wastes shipped to wastes received.

Shipper	Receiver	Shipped Tons	Received Tons	Difference
Facility07, Texas	Facility08, Texas	105,815	0	105,815
Facility09,	Facility10, Wisconsin	46,779	0	46,779
Wisconsin				
Facility11, Ohio	Facility12, Ohio	19,251	0	19,251

A Biennial Report Data Quality Report, "Top Discrepancies of Waste Shipped to Waste Received Report," is available in RCRAInfo to assist implementers with this data quality check.

 Check received versus shipped quantities nationally and inside the State. The table below presents examples of discrepancies of wastes received to wastes shipped.

Receiver	Shipper	Received Tons	Shipped Tons	Difference
Facility13, Utah	Facililty14, Utah	23,684	71,047	47,363
Facility15, Utah	Facility16, Utah	48,828	16,276	32,552
Facility17, Illinois	Facility18, Wisconsin	16	28,394	28,378

A Biennial Report Data Quality Report, "Top Discrepancies of Waste Received to Waste Shipped Report," is available in RCRAInfo to assist implementers with this data quality check.

 Circulate summary reports to districts, inspectors, and permitters 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 certain EPA Regions) on how to develop some of the data elements that need to be submitted to the RCRAInfo system as part of the Biennial Report data collection process. These RCRAInfo data requirements were developed from the recommendations in the <a href="https://www.winner.com/w

In particular, this appendix explains to implementers:

- How to set the "Federal Generator Status" for the RCRA Subtitle C Site Identification Form (Site ID Form);
- 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;
- 3. Options for Selecting the BR Data to Be Stored in RCRAInfo Based on the "Include in National Report" Flags; and
- 4. How EPA Will Compile the Data for the National Biennial Report.

The "Federal Generator Status" and the "Include in National Report" flags are data elements in the Site ID, GM, and WR Form flat files that implementers must submit to EPA Headquarters (HQ) as part of their BR data submission. The specific formatting and data quality standards that implementers must meet when submitting the BR data (i.e., file specifications) are described in the

RCRAInfo File Specification Guide: Hazardous Waste Report Submissions document.³⁰

How to Set the "Federal Generator Status" for the Site ID Form

EPA uses the Federally-defined generator status to support many of the Agency's program evaluation functions (e.g., regulatory oversight activities, Congressional reporting). EPA also uses the Federal large quantity generator (LQG) and small quantity generator (SQG) universe sizes to identify compliance rates, high-risk generator sectors, and facilities that need to be inspected. Therefore, the Federally-defined generator status must be used to ensure consistency and report meaningful universe numbers when performing interstate comparison analyses.

Based on the above needs and, as part of the recommendation in the UID/WAM PAA for creating the Site ID Form, the States and EPA agreed to:

Collect both State and Federal generator status from States. For each RCRA Site, two generator status values should be submitted to EPA's RCRAInfo system: one for the generator status as defined by the State regulations; and a second for the equivalent Federally-defined generator status.

https://rcrapublic.epa.gov/rcrainfoweb/action/mainmenu/view.

³⁰ Available at

Consequently, even though RCRA Sites are instructed to indicate one generator status on their Site ID Form³¹, implementers must provide two generator statuses in the RCRAInfo system: (1) the State-defined generator status, as identified by their own regulatory definitions, and (2) the Federally-defined generator status, as identified by the Federal regulatory definition. Appropriate fields are included in the Site ID Form file specification (i.e., SI1 file) for this purpose.

For many States, the State-defined generator status and the Federally-defined generator status of a RCRA Site will be the same. However, for States with regulations that are either more stringent or broader in scope than the Federal regulations, a RCRA Site may have different State-defined and Federally-defined generator statuses. For example, a RCRA Site may identify itself as an LQG according to State regulations, but be considered an SQG under the Federal definition. A State-only LQG must follow State regulations that are equivalent to Federal LQG regulation requirements, even though it does not meet the Federal definition of an LQG. The same situation is also true for State SQGs and Federal very small quantity generators (VSQGs).

To determine the Federally-defined generator status of RCRA Sites, a State should use information collected directly from the RCRA Sites or extrapolate from waste generation information provided on the Federal BR forms or State equivalent forms. For States having more stringent or broader in scope regulations that affect the generator status, precise determination of the Federally-defined generator status may not always be possible. The best approximation is acceptable in these cases.

The table below shows examples of the two generator statuses that should be reported to the RCRAInfo system.

³¹ Item 10.A.1 in the Federal Site ID Form (i.e., Type of Regulated Waste Activity, Hazardous Waste Activities, Generator of Hazardous Waste).

State	Federal Generator Status	State Generator Status
Facililty19, Connecticut	LQG	LQG
Facility20, Florida	SQG	SQG
Facility21, Minnesota	SQG	LQG

LQG = Large Quantity Generator SQG = Small Quantity Generator VSQG = Very Small Quantity Generator

Note: RCRA Sites are instructed to indicate on the Site ID Form their generator status *as of the date* submitting the BR. Some RCRA 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

The Hazardous Waste Report Instructions and Form booklet developed by EPA [EPA Form 8700-13 A/B] contains only the requirements for Federal RCRA reporting. However, many States require sites to submit a variety of other information with the Federally-required data. Both the Federally-required data and the State-only data may be stored in the RCRAInfo system, as long as the data submission meets all the specified formatting and data quality standards.³²

EPA uses the BR data stored in the RCRAInfo to summarize hazardous generation, management, shipment, and receipt volumes at the national level (i.e., produce the National Biennial Report). When compiling the national data, EPA must be able to differentiate the Federally-required data (i.e., the data to be used for calculations in the National Biennial Report) from other data. To achieve this, EPA created data field labeled "INCLUDE IN NATIONAL REPORT." This data field, also known as the "Include in National Report" flag, is included in the Site ID, GM, and WR Form flat files that implementers must submit to EPA HQ.

Headquarters are found in the RCRAInfo File Specification Guide: Hazardous Waste Report Submissions document, (available at

https://rcrapublic.epa.gov/rcrainfoweb/action/main-menu/view).

The formatting and data quality standards (i.e., file specifications) that States and EPA Regions must meet when submitting Hazardous Waste Report data to EPA

It is the responsibility of each implementer to determine which RCRA Sites and wastes should be included and excluded from the National Biennial Report. To do this, the implementer must provide either a "Yes" or "No" flag for each Site ID Form and for each of the site's GM and WR Forms. A State with a more stringent or broader in scope program needs to make sure that the "Include in National Report" flags are set properly at all levels (i.e., for each of the forms).

Sites to Be Included in the National Biennial Report

In the Hazardous Waste Report Instructions and Form booklet [EPA Form 8700-13 A/B]³³, EPA identifies which RCRA Sites are required, by Federal statute, to complete and file a BR³⁴. These RCRA Sites include sites that:

Met the definition of a RCRA Large Quantity Generator (LQG) during the collection year (odd year); or

Treated, stored, recycled or disposed of RCRA hazardous wastes on-site or shipped hazardous waste offsite to a RCRA permitted treatment, storage, recycling and disposal facility, or received hazardous wastes from off-site hazardous waste generators without storing the wastes before recycling during the reporting year (odd years).

The implementer must set the Site ID Form flag to "Yes" for those sites that were Federal LQGs or 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 or TSDFs during the reporting year.

The implementer may have a TSDF which did not generate or manage waste during the reporting year (i.e., has no GM or WR Form). Because TSDFs must report, the implementer would set

the Site ID Form flag to "Yes" even if they do not have GM or WR Forms.

The table below presents examples of how an implementer should set the Site ID Form flag. As shown in the example, the implementer must set the Site ID Form flag to "Yes" for those sites that were Federal LQGs or TSDFs during the reporting year.

State	Federal Generator Status	State Generator Status	TSD Activity	Site ID Form Flag
Facility19, Connecticut	LQG	LQG	N	Y
Facility20, Florida	SQG	SQG	N	N
Facility21, Minnesota	SQG	LQG	Y	Y

LQG = Large Quantity Generator SQG = Small Quantity Generator VSQG = Very Small Quantity Generator

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."

Wastes to Be Included in the National Biennial Report

In the Hazardous Waste Report Instructions and Form booklet [EPA Form 8700-13 A/B]³⁵, EPA identifies what RCRA Sites must report on GM and WR Forms^{36, 37}:

A site required to file the Hazardous Waste Report must submit <u>Waste Generation and Management (GM)</u>
<u>Form(s)</u> 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 <u>Waste</u> Received from Off-site (WR) Form(s) if, during the reporting year, it received

³³ Available at https://rcrapublic.epa.gov/rcrainfoweb/action/main-menu/view.

³⁴ Section "Determining Who Must File."

³⁵ Available at https://rcrapublic.epa.gov/rcrainfoweb/action/mainmenu/view.

³⁶ Section "Filing a Hazardous Waste Report," Subsection "Which Forms to Submit and What to Report."

³⁷ See the *RCRA Subtitle C Reporting Instructions and Forms* document (available at https://rcrapublic.epa.gov/rcrainfoweb/action/main-menu/view) for instructions on how the GM and WR Forms should be completed.

RCRA hazardous waste from off-site and managed the waste on-site (including subsequent transfer off-site).

For those sites that have the Site ID Form flag set to "Yes," the implementer must determine whether a waste will be counted. That is, the implementer must set the "Include in National Report" flag to "Yes" for every GM Form (page) and every WR Form (subpage) 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).

The table below shows examples of how an implementer should set the GM Form flag for sites with a Site ID Form flag set to "Yes."

State	Site ID Form Flag	GM Form Page Number	Federal Waste	GM Form Flag
Facility19, Connecticut	Y	24	Υ	Υ
Facility21 Minnesota	Υ	1	Υ	Υ

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 an SQG since its Site ID Form flag would be set to "No." The implementer also must set the flag for every GM and WR Form submitted for these sites to "No."

The table below shows an example of how an implementer should set the GM Form flag for a site with the Site ID Form flag set to "No."

	State	Site ID Form Flag	GM Form Page Number	Federal Waste	GM Form Flag
ſ	Facility20, Florida	N	4	Υ	N

See the discussions below for setting the "Include in National Report" flag 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.

Foreign Exports

The Hazardous Waste Report Instructions and Form booklet [EPA Form 8700-13 A/B] indicates that generators should not use the GM Form for Federal exports of hazardous waste³⁸:

Unless required by your State, hazardous wastes that were, during the reporting year, exported directly out of the U.S. to a site located in foreign country. Facilities that export hazardous waste must file a separate Annual Report under 40 CFR 262.83(g). (This Annual Report will be in addition to the Hazardous Waste Report, if your State requires you to submit a Hazardous Waste Report with hazardous waste exported to a site located in a foreign country.)

However, some States require this waste to be reported in the BR. In these cases, waste shipped off-site (Section 3) to foreign countries (EPA ID to which waste was shipped is entered using a Foreign Site Identification Number or as FC with foreign country name) should be marked "Yes." These GM Forms will be included in the National Biennial Report.

On-Site Management without a RCRA Permit

There seems to be some confusion about generators reporting treatment and recycling activities without being permitted TSDFs, 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. The "Include in National Report" flag should be set to "Yes" for these data.

³⁸ Section "Instructions for Filling Out the Waste Generation and Management (GM) Form," Subsection "Wastes Not to Be Reported."

Wastewaters

(Go to Part 2 for additional information)

If in the Federal scheme a waste should not be reported, then the implementer must set the "Include in National Report" flag for such a GM Form as "No" 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);
 - H081 (biological treatment);
 - H100 (physical treatment only), with special interest on waste streams managed through adsorption or air/stream stripping;
 - 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.

³⁹ The formatting and data quality standards (i.e., file specifications) that States and EPA Regions must meet when submitting Hazardous Waste Report data to EPA Headquarters are found in the RCRAInfo File Specification Guide: Hazardous Waste Report Submissions document,

- 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, wastewater treatment 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 "No."

Options for Selecting the BR Data to be Stored in RCRAInfo Based on the "Include in National Report" Flags

EPA's Hazardous Waste Report Instructions and Forms booklet [EPA Form 8700-13 A/B] contains only the requirements for Federal RCRA reporting. However, many States require sites to submit a variety of other information with the Federally-required data.

Implementers may store both the Federally-required data and the State-only data in the RCRAInfo system, as long as the data submission meets all the specified formatting and data quality standards.³⁹ For example, implementers may store State-only data for sites that have EPA Identification numbers and for the data fields shown on the Federal forms.

Implementers have three options for storing the BR data in RCRAInfo:

Option 1 - The implementer wants to store in RCRAInfo all waste 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

(available at

https://rcrapublic.epa.gov/rcrainfoweb/action/main-menu/view).

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 stored in RCRAInfo 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 wants to store in RCRAInfo all waste data he/she received from sites that are to be included in the National Biennial Report. The implementer would only submit data for the sites which have the Site ID Form flag set to "Yes." He/she would submit all of these sites' GM or WR Forms. The "Include in National Report" flag for each of 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. Because 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 - The implementer wants to store in RCRAInfo only the site and waste data that are to be included in the National Biennial Report. The implementer would select only those sites that have "Yes" for the Site ID Form flag. Then, for these sites, 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." For these sites, EPA then selects the GM and WR Forms with the "Include in National Report" flag set to "Yes."

From the selected data, EPA compiles the total number and a list of generators reporting and the quantity of RCRA hazardous waste they generated. EPA also compiles the total number and list of managers reporting and the quantity of RCRA hazardous waste they managed. In addition, EPA calculates several other quantities, including: waste shipped, waste received, interstate waste shipped, and interstate waste received.

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 SOUD WASTE AND EMPROPRIES

THE 14 -

MEMORANDUM

SUBJECT: Resource Conservation and Recovery Act (RCRA) Biomial 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 Ltability Act of 1980 (CERCLA), as amended, 42 U.S.C. § 9601, et. seq. The intent of this memo is to serve as a reminder

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This document provides guidance to Regional staff regarding how the Agency interprets and implements the National Off and Hazardous Substance Pollution Contingency Plan (NCP), which provides the blueprint for CERCLA implementation. However, this document does not substitute for those providions or regulations, nor is at 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 LQOs² 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. 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. A list of state contacts, reporting frequency and form information can be found at: http://www.epa.sov/epawaste/inforesources/data/biernialreport/index.htm.

Bieunial 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. Separately 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.

³While RCRA regulations specifically define the quantities of hazardous waste generated on a monthly basis that constitute conditionally exempt small quantity generators (CESOGs), 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 neutre hazardous waste itsued 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 secure lazardous wastes lead in 40 CFR 261.31-33 in a calendar month. (See 40 CFR 261.5(e).)

³ The information is submitted on EPA Form 8700-13 A/B. RCRA sections 3002 and 3004 (42 U.S.C. §§ 6922 and 6924) require EPA to establish alandards for recordkeeping and reporting of hazardous waste. Section 3002 applies to lazardous 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(1)(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 researd, recycled, or disposad and the quantity managed.

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, Tenuessee; (Region 5) Hinois, Indiana, Michigan, Mismesots, Ohio, Wisconsin, (Region 6) Arkannas, Louisians, Oklahoma, Texas, (Region 7) Kamaas, Missouri, (Region 8) Montana; (Region 9) Arizona, California, Guarn; (Region 10) Idaho, Oregon, Washington.
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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, assuance 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 hiennial 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.

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 onsite, but managed off-site for the entire biennial reporting calendar year.

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 cut to not be a LQG they would be considered a protective filer.

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.

LQGs are required to submit, by March 1 of each even-numbered year, a Brennial Report detailing their hazardous waste

management activities for the previous odd-numbered calendar year

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

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.cpa.gov/epawaste/inforesources/pubs/oriental/

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

Canclusion

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 biomnial 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.cpa.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.

APPENDIX G: REPORTING HAZARDOUS WASTE IMPORT SHIPMENTS

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Note: The EPA Administrator, Gina McCarthy, signed the Hazardous Waste Export-Import Revisions final rule on October 28, 2016 and it was published in the Federal Register (FR) on November 28, 2016. The final rule was effective in all States on December 31, 2016 in order to comply with Executive Order 13659. As a result, some of the regulatory citations in the letter in this appendix are outdated.



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

March 1, 2016

Re: Reporting hazardous waste import shipments

Dear Sir or Madam:

EPA is sending you this letter because you: (a) have previously reported hazardous waste import shipments as either a RCRA permitted treatment, storage and disposal facility (TSDF) or large quantity generator (LQG) for the 2011 or 2013 biennial report (BR); or (b) were identified as the receiving facility or importer for hazardous waste import shipments approved to enter the United States in 2015. As described below, the Environmental Protection Agency's (EPA) Office of Inspector General (OIG) reported that a substantial number of TSDFs and LQGs were not reporting hazardous waste imports correctly in their BR submissions. Therefore, in an effort to improve compliance with BR requirements, EPA is taking this opportunity to explain the applicable reporting requirements to all TSDFs and LQGs regarding their hazardous waste import shipments.

Background

On July 6, 2015, the Environmental Protection Agency's Office of Inspector General (OIG) issued a report titled "EPA Does Not Effectively Control or Monitor Imports of Hazardous Waste," available online at http://www.epa.gov/sites/production/files/2015-09/documents/oigreportonhwimports015-0.pdf. The report noted that, based on compiled BR data, U.S. TSDFs reported receiving 90,000 tons of hazardous waste import shipments in 2011, while LQGs reported importing 3,000 tons of foreign generated hazardous waste shipments in 2011. Additionally, the report stated that 23 TSDFs submitted manifests to EPA's International Compliance Assurance Division for hazardous waste import shipments received in 2011 that the OIG could not match to the facilities' biennial reporting on hazardous waste import shipments received in 2011. Conversely, the OIG noted that 35 TSDFs submitted biennial reports on hazardous waste import shipments received in 2011 that the OIG could not match to manifests

submitted to EPA's International Compliance Assurance Division for hazardous waste import shipments received in 2011.

RCRA Regulatory Requirements

Under the federal requirements in 40 CFR §§ 264.71(a)(3) and 265.71(a)(3) (or equivalent authorized state requirements), owners and operators of hazardous waste TSDFs receiving hazardous waste from a foreign source must submit a copy of documentation confirming EPA's consent to the import of the hazardous waste at the same time they submit a copy of the RCRA hazardous waste manifest, i.e., within thirty (30) days of each import shipment's delivery. Similarly, under the federal requirements in 40 CFR §§ 264.75 and 265.75 for TSDFs and/or the 40 CFR § 262.41 for importers complying with generator requirements (or equivalent authorized state requirements), TSDFs and importers that are large quantity generators must report on imported hazardous waste as part of their BR submittals to their respective State Agencies or regional EPA offices (if the State Agency is not authorized to implement the BR program). As a reminder, BR submittals are due by March 1 of each even numbered year.

When calculating the total quantity of hazardous waste generated in a month, importers should add the quantity of hazardous waste imported during the calendar month to any hazardous waste generated at the importer's physical site during that calendar month. Under the RCRA regulations the date an import of hazardous waste enters the county is considered the date the waste is "generated". All hazardous waste import shipments listing the importer's EPA ID number in Item 1 on the RCRA hazardous waste manifest should be included as part of the total monthly quantity, regardless of the port of entry or border crossing used.

If you are the owner or operator of a TSDF receiving hazardous waste import shipments, you must report such hazardous waste import shipments using the "waste received from off-site (WR)" form, as appropriate. If your facility was also acting as the importer of record, you assumed generator requirements for those import shipments and must also report the import shipments as generated hazardous wastes from a foreign source using the "waste generation and management (GM)" form if your facility's total monthly quantity met the large quantity generator threshold for any month during the reporting year. An EPA-acceptable alternative for you to meet your generator biennial reporting requirement for those import shipments would be for you to add a statement to the comment field of your WR form for those import shipments noting that your TSDF was the importer of record for the listed import shipment(s). Please check with your authorized State Agency on how best to meet your generator biennial reporting requirements.

If your facility was not acting as the importer, EPA strongly encourages you to remind the importer to comply with the biennial reporting requirements in 40 CFR § 262.41 (or

equivalent authorized state requirements). All parties acting as the importer could be held jointly and severally liable for compliance with the generator requirements of Part 262¹.

If you have any questions regarding import requirements, please contact Laura Coughlan by telephone at 703-308-0005, or by email at coughlan.laura@epa.gov. If you have any questions about import consents issued by EPA, please contact Jean Shaw by telephone at 202-564-7111, or by email at shaw.jean@epa.gov.

Sincerely.

Davis Jones, Acting Director International Compliance Assurance Division

Office of Federal Activities

Office of Enforcement and Compliance Assurance

Betsy Devlin, Director

Materials Recovery and Waste Management

Division

Office of Resource Conservation and Recovery Office of Land and Emergency Management

¹ Memo from John Skinner, Director of EPA's Office of Solid Waste to Harry Seraydarian, Director, Toxics and Waste Management Division, EPA Region IX, June 25, 1985, available online at http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/E27643CD81ABBDCA8525670F006BD187/\$file/11085.pdf.

APPENDIX H: HAZARDOUS WASTE GENERATOR IMPROVEMENTS FINAL RULE REGULATORY CROSSWALK

(Go to <u>Table of Contents</u>)

This appendix identifies sections in the Code of Federal Regulations (CFR) affected by the Hazardous Waste Generator Improvements Final Rule. For each affected section, the appendix provides the regulatory citation prior to promulgation of the final rule (i.e., the old regulatory citation) and the corresponding regulatory citation after promulgation of the final rule (i.e., the new regulatory citation).

	Old		New		
Citation	Description of citation	Violation	Citation	Description of citation	Violation
258.28	Ban on liquids in landfills	3	262.35	Bulk or non-containerized liquid hazardous waste cannot be placed in any landfill.	262.C
258.28	Ban on liquids in landfills	?	262.14(b)	Bulk or non-containerized liquid hazardous waste cannot be placed in any landfill.	262.A
261.5(b)	exceptions to CESQG regulatory exemption	261.A	262.14(a)	VSQGs can accumulate without being subject to parts 124, 262 (except 262.10-262.14) through 268, 270, and notification, provided they comply with certain conditions in 262.14.	262.A
261.5(c)	when making 261.5 and part 262 quantity determinations, generator must include all hazardous waste except:	261.A	262.13(c)	When making monthly quantity- based determinations of generator category, generators must include all hazardous waste except what is listed.	262.A
261.5(d)	when making 261.5 and part 262 quantity determinations, generator must include all hazardous waste except:	261.A	262.13(d)	When making monthly quantity- based determinations of generator category, generators does not need to include certain hazardous waste listed.	262.A
261.5(e)	acute hazardous quantity limitations	261.A	262.14(a)(3)	Exceeding acute hazardous waste quantity limitations means VSQG waste is subject to full regulation	262.A
n/a	n/a	n/a	262.14(a)(4)	Exceeding hazardous waste quantity limitations means VSQG	262.A

				waste is subject to full regulation as SQG waste	
261.5(f)	acute hazardous quantity limitations	261.A	262.13	Generators must determine generator category on a monthly basis.	262.A
261.5(g)	generator requirements for hazardous waste to be conditionally exempt:	261.A	262.14(a)(5)	VSQG must either treat or dispose its hazardous waste on-site or ensure delivery to one of 8 TSDFs	262.A
261.5(h)	mixing with non- hazardous waste	261.A	262.13(f)(1)(i)	Mixing VSQG waste with non- hazardous waste	262.A
261.5(i)	mixing with non- hazardous waste	261.A	262.13(f)(1)(ii)	Mixing VSQG waste with non- hazardous waste where mixture exhibits a HW characteristic	262.A
261.5(j)	mixtures with used oil subject to part 279 requirements	261.A	262.13(f)(1)(iii)	VSQG mixtures of HW and used oil subject to part 279 requirements	262.A
262.10	establish standards for generators	262.A	262.10	Establishes independent requirements and conditions for exemption for generators	262.A
262.11	determine if a waste is a hazardous waste	262.A	262.11	Generators must determine is their solid waste is a hazardous waste	262.A
262.12	EPA identification number required	262.A	262.18	EPA identification number required for generators	262.A
262.34(a)	90 days accumulation without a permit; specific provisions which must be met	262.C	262.17(a)	90 days accumulation without a permit (LQGs); specific provisions which must be met	262.A
262.34(a)(1)(i)	in containers and generator complies with subparts i, aa, bb & cc of part 265; and/or	262.C	262.17(a)(1)	in containers and LQG complies with container management standards and subparts aa, bb & cc of part 265	262.A

262.34(a)(1)(ii)	in tanks and generator complies with subparts j, aa, bb and cc of part 265, except 265.197(c) and 265.200; and/or	262.C	262.17(a)(2)	In tanks and LQG complies with subparts j, aa, bb and cc of part 265, except 265.197(c) and 265.200	262.A
262.34(a)(1)(iii)	on drip pads; generator compliance with subpart w of part 265; maintenance of the following records at the facility:	262.C	262.17(a)(3)	on drip pads; LQG complies with subpart W of part 265 and maintains records including removing wastes every 90 days	262.A
262.34(a)(1)(iv)	may store waste on- site for 90 days without a permit in containment buildings; generator must place professional engineer cert in operating record by 60 days past first operation. records required.	262.C	262.17(a)(4)	In containment buildings; LQG complies with subpart DD of part 265, labeling, professional engineer certification, and maintains records including removing wastes every 90 days	262.A
262.34(a)(2)	date each period of accumulation begins is marked and visible	262.C	262.16(b)(6)(i)(C)	date each period of accumulation begins is marked and visible on each SQG container	262.A
262.34(a)(2)	date each period of accumulation begins is marked and visible	262.C	262.17(a)(5)(i)(C)	date each period of accumulation begins is marked and visible on each LQG container	262.A
262.34(a)(3)	labeled or marked "hazardous waste"	262.C	262.16(b)(6)(i)(A)	Label or mark "Hazardous Waste" on each SQG container	262.A
262.34(a)(3)	labeled or marked "hazardous waste"	262.C	262.17(a)(5)(i)(A)	Label or mark "Hazardous Waste" on each LQG container	262.A

n/a	n/a	n/a	262.16(b)(6)(i)(B)	Label or mark each SQG container with an indication of the hazards of the contents	262.A
n/a	n/a	n/a	262.17(a)(5)(i)(B)	Label or mark each LQG container with an indication of the hazards of the contents	262.A
262.34(a)(4)	compliance with 265, subparts c and d, 265.16, and 268.7(a)(5)	262.C	262.17(a)(6)	Emergency preparedness and prevention and Contingency Plan requirements	262.M
262.34(a)(4)	compliance with 265, subparts c and d, 265.16, and 268.7(a)(5)	262.C	262.17(a)(7)	Personnel training requirements.	262.A
262.34(a)(4)	compliance with 265, subparts c and d, 265.16, and 268.7(a)(5)	262.C	262.17(a)(9)	Land Disposal Restrictions (LDR) requirements for LQGs	262.A
262.34(b)	consequences of accumulation for longer than 90 days; criteria for extension beyond this period	262.C	262.17(b)	If LQG accumulates for longer than 90 days, it is a storage facility, unless granted an extension	262.A
262,34(c)	accumulation of up to 55 gal. of hazardous waste or 1 qt. acutely hazardous waste at point of generation; provisions which must be complied with; procedure if quantity limit is exceeded	262.C	262.15	Satellite accumulation area (SAA) requirements: up to 55 gal. of hazardous waste or 1 qt. acutely hazardous waste at point of generation; provisions which must be complied with; procedure if quantity limit is exceeded	262.A

262.34(d)	180 day accumulation for 100 kg to 1,000 kg/month generator, provided:	262.C	262.16(b)	180 days accumulation without a permit (SQGs); specific provisions which must be met	262.A
262.34(d)(1)	quantity never exceeds 6000 kg	262.C	262.16(b)(1)	quantity never exceeds 6000 kg at any one time; exceeding hazardous waste quantity limitations means SQG waste is subject to full regulation as LQG waste	262.A
262.34(d)(2)	compliance with 265 of this chapter, subpart i, except 265.176 and 265.178	262.C	262.16(b)(2)	in containers and SQG complies with container management standards	262.A
262.34(d)(3)	compliance with 265.201	262.C	262.16(b)(3)	In tanks and SQG complies with tank management standards	262.A
n/a	n/a	n/a	262.16(b)(4)	On drip pads and SQG complies with subpart W of part 265 and maintains records including removing wastes every 90 days	262.A
n/a	n/a	n/a	262.16(b)(5)	In containment buildings; SQG complies with subpart DD of part 265, labeling, professional engineer certification, and maintains records including removing wastes every 90 days	262.A
262.34(d)(4)	compliance with 262.34(a)(2) & (3) and 265, subpart c and 268.7(a)(4)	262.C	262.16(b)(7)	Land disposal restrictions (LDR) requirements for SQGs	262.A
262.34(d)(4)	compliance with 262.34(a)(2) & (3) and 265, subpart c and 268.7(a)(4)	262.C	262.16(b)(8)	SQG preparedness and prevention requirements	262.A

262.34(d)(5)	compliance with specific emergency precautions and procedures	262.C	262.16(b)(9)	SQG emergency procedures	262.A
262.34(e)	200 miles or more transport, 270 day accumulation time; compliance with 262.34(d)	262.C	262.16(c)	SQGs transporting 200 miles or more can accumulate for 270 days if they comply with accumulation standards	262.A
262.34(f)	requirements if accumulation in excess of 6000 kg or longer than 180 days (270 days if waste is transported over a distance of 200 miles)	262.C	262.16(d)	If SQG accumulates for longer than 180 days (or 270 days if applicable), it is a storage facility, unless granted an extension	262.A
262.34(g)	if generate 1,000 kg or more of hazardous waste per month and also generate f006 waste, may accumulate f006 waste on-site for up to 180 days w/o a permit interim status in specified situations.	262.C	262.17(c)	LQGs may accumulate F006 waste on site up to 180 days without a permit if it meets certain conditions.	262.A
262.34(h)	electroplating: f006 wastewater treatment sludges and 1,000 kg of waste per month & if must transport it ?200 miles, may store on-site for >90 days but not >270 days	262.C	262.17(d)	LQGs may accumulate F006 waste on site up to 270 days without a permit if it must transport over 200 miles for metals recovery and it meets certain conditions.	262.A

	without permit/ interim status.				
262.34(i)	electroplating: f006 wastewater sludges and 1,000 kg of waste per month and stores it beyond limits in (g) and (h) or >20,000 kg on-site are subject to CFR 264, 265, 267& 270. extensions/exceptions	262.D	262.17(e)	If LQG accumulates F006 for longer than 180 days (or 270 days if applicable) or exceeds 20,000 kg on site, it is a storage facility, unless granted an extension	262.A
n/a	n/a	n/a	262.16(e)	SQGs that receive their shipments back as rejected loads can accumulate on site if they comply with the accumulation standards and certain manifest provisions.	262.A
n/a	n/a	n/a	262.17(g)	LQGS that receive their shipments back as rejected loads can accumulate on site if they comply with the accumulation standards and certain manifest provisions.	262.A
262.40(c)	test results and waste analyses retention for 3 years	262.D	262.11(f)	Keep test results and waste analyses for 3 years	262.A
265.111	manner of closing		262.17(a)(8)(i)	LQGs must either place a notice in their operating record or notify when closing an accumulation unit	262.A
265.111	manner of closing		262.17(a)(8)(ii)	LQGs must notify when closing the entire facility	262.A
265.114	disposal and decontamination requirements during		262.17(a)(8)(iii)	For containers, tanks, and containment buildings, LQGs must meet closure performance	262.A

	closure; 262 generator requirements		standards (i.e., clean close) or close as a landfill	
265.114	disposal and decontamination requirements during closure; 262 generator requirements	262.17(a)(8)(iv)	For drip pads, LQGs must meet closure performance standards (i.e., clean close) or close as a landfill	262.A
265.171	requirements when container is not in good condition	262.15(a)(1)	Requirements when container is not in good condition in SAA accumulation area	262.A
265.171	requirements when container is not in good condition	262.16(b)(2)(i)	Requirements when container is not in good condition in SQG accumulation area	262.A
265.171	requirements when container is not in good condition	262.17(a)(1)(ii)	Requirements when container is not in good condition in LQG accumulation area	262.A
265,172	container must be compatible with hazardous waste	262.15(a)(2)	Container must be compatible with hazardous waste in SAA central accumulation areas	262.A
265.172	container must be compatible with hazardous waste	262.15(a)(3)	Container must be compatible with hazardous waste in SAA central accumulation areas	262.A
265.172	container must be compatible with hazardous waste	262.16(b)(2)(ii)	Container must be compatible with hazardous waste in SQG central accumulation areas (CAA)	262.A
265.172	container must be compatible with hazardous waste	262.17(a)(1)(iii)	Container must be compatible with hazardous waste in LQG central accumulation areas (CAA)	262.A
265.173(a)	closed container during storage	262.15(a)(4)	Closed container during storage in SAA, with limited exceptions.	262.A
265.173(a)	closed container during storage	262.16(b)(2)(iii)	Closed container during storage in SQG CAA, with limited exceptions.	262.A
265.173(a)	closed container during storage	262.17(a)(1)(iv)	Closed container during storage in LGQ CAA, with limited exceptions.	262.A

n/a	n/a	n/a	262.14(a)(5)(viii)	VSQGs can send their hazardous waste to be consolidated at an LQG under the control of the same person if they mark their containers hazardous waste and indicate the hazards of the contents	262.A
n/a	n/a	n/a	262.230	Only VSQGs and SQGs can use alternative standards for episodic generation	262.L
n/a	n/a	n/a	262.232(a)	VSQGs can maintain their generator category if they manage their hazardous waste according to these conditions	262.L
n/a	n/a	n/a	262.232(b)	SQGs can maintain their generator category if they manage their hazardous waste according to these conditions	262.L
n/a	n/a	n/a	262.233	VSQGs and SQGs can petition for a second episodic event and maintain their generator category according to these conditions	262.L
n/a	n/a	n/a	262.17(f)	LQGs can consolidate hazardous waste from VSQGs under the control of the same person without a permit if they notify, keep records, report on the BR, and manage the VSQG as LQG waste when it arrives at the LQG	262.A

APPENDIX I: BIENNIAL REPORT COUNTRY CODES

(Go to <u>Table of Contents</u>)

Country				
Code	Country Name			
AD	ANDORRA			
AE	UNITED ARAB EMIRATES			
AF	AFGHANISTAN			
AG	ANTIGUA AND BARBUDA			
Al	ANGUILLA			
AL	ALBANIA			
AM	ARMENIA			
AN	NETHERLANDS ANTILLES			
AO	ANGOLA			
AQ	ANTARCTICA			
AR	ARGENTINA			
AS	AMERICAN SAMOA			
AT	AUSTRIA			
AU	AUSTRALIA			
AW	ARUBA			
AZ	AZERBAIJAN			
BA	BOSNIA AND HERZEGOVINA			
BB	BARBADOS			
BD	BANGLADESH			
BE	BELGIUM			
BF	BURKINA FASO			
BG	BULGARIA			
BH	BAHRAIN			
BI	BURUNDI			
BJ	BENIN			
BM	BERMUDA			
BN	BRUNEI DARUSSALAM			
ВО	BOLIVIA			
BR	BRAZIL			
BS	BAHAMAS			
BT	BHUTAN			
BV	BOUVET ISLAND			
BW	BOTSWANA			
BY	BELARUS			
BZ	BELIZE			
CA	CANADA			
CC	COCOS (KEELING) ISLANDS			
CD	CONGO, THE DEMOCRATIC REPUBLIC OF THE			
CF	CENTRAL AFRICAN REPUBLIC			
CG	CONGO			
CH	SWITZERLAND			
CI	COTE D'IVOIRE			
CK	COOK ISLANDS			

Country Code	Country Name
CL	CHILE
СМ	CAMEROON
CN	CHINA
СО	COLOMBIA
CR	COSTA RICA
CU	CUBA
CV	CAPE VERDE
CX	CHRISTMAS ISLAND
CY	CYPRUS
CZ	CZECH REPUBLIC
DE	GERMANY
DJ	DJIBOUTI
DK	DENMARK
DM	DOMINICA
DO	DOMINICAN REPUBLIC
DZ	ALGERIA
EC	ECUADOR
EE	ESTONIA
EG	EGYPT
EH	WESTERN SAHARA
ER	ERITREA
ES	SPAIN
ET	ETHIOPIA
FI	FINLAND
FJ	FIJI
FK	FALKLAND ISLANDS (MALVINAS)
FM	MICRONESIA, FEDERATED STATES OF
FO	FAROE ISLANDS
FR	FRANCE
GA	GABON
GB	UNITED KINGDOM
GD	GRENADA
GE	GEORGIA
GF	FRENCH GUIANA
GH	GHANA
GI	GIBRALTAR
GL	GREENLAND
GM	GAMBIA
GN	GUINEA
GP	GUADELOUPE
GQ	EQUATORIAL GUINEA
GR	GREECE
GS	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS

Country	
Code	Country Name
GT	GUATEMALA
GU	GUAM
GW	GUINEA-BISSAU
GY	GUYANA
HK	HONG KONG
НМ	HEARD ISLAND AND MCDONALD ISLANDS
HN	HONDURAS
HR	CROATIA
HT	HAITI
HU	HUNGARY
ID	INDONESIA
IE	IRELAND
IL	ISRAEL
IN	INDIA
Ю	BRITISH INDIAN OCEAN TERRITORY
IQ	IRAQ
IR	IRAN, ISLAMIC REPUBLIC OF
IS	ICELAND
IT	ITALY
JM	JAMAICA
JO	JORDAN
JP	JAPAN
KE	KENYA
KG	KYRGYZSTAN
KH	CAMBODIA
KI	KIRIBATI
KM	COMOROS
KN	SAINT KITTS AND NEVIS
KP	KOREA, DEMOCRATIC PEOPLES REPUBLIC OF
KR	KOREA, REPUBLIC OF
KW	KUWAIT
KY	CAYMAN ISLANDS
KZ	KAZAKSTAN
LA	LAO PEOPLE'S DEMOCRATIC REPUBLIC
LB	LEBANON
LC	SAINT LUCIA
LI	LIECHTENSTEIN
LK	SRI LANKA
LR	LIBERIA
LS	LESOTHO
LT	LITHUANIA
LU	LUXEMBOURG LATVIA
LV LY	
	LIBYAN ARAB JAMAHIRIYA
MA	MONACO
MC	MONACO MOLDOVA. REPUBLIC OF
MD	MOLDOVA, REPUBLIC OF MADAGASCAR
MG MH	
MK	MARSHALL ISLANDS MACEDONIA, THE FORMER YUGOSLAV
	REPUBLIC OF
ML	MALI
MM	MYANMAR
MN	MONGOLIA
MO	MACAU

MP NORTHERN MARIANA ISLANDS MQ MARTINIQUE MR MAURITANIA MS MONTSERRAT MT MALTA MU MAURITUS MV MALDIVES MW MALAWI MX MEXICO MY MALAYSIA MZ MOZAMBIQUE NA NAMIBIA NC NEW CALEDONIA NE NIGER NF NORFOLK ISLAND NG NIGERIA NI NICARAGUA NL NETHERLANDS NO NORWAY NP NEPAL NR NAURU NU NIUE NZ NEW ZEALAND OM OMAN PA PANAMA PE PERU PF FRENCH POLYNESIA PG PAPUA NEW GUINEA PH PHILIPPINES PK PAKISTAN PL POLAND PM SAINT PIERRE AND MIQUELON PN PITCAIRN PS PALESTINIAN TERRITORY, OCCUPIED PT PORTUGAL PY PARAGUAY QA QATAR RE REUNION RO ROMANIA RU RUSSIAN FEDERATION RW RWANDA SE SWEDEN SG SINGAPORE SH SAINT HELENA SI SLOVAKIA SL SIERRA LEONE	Country Code	Country Name
MR MAURITANIA MS MONTSERRAT MT MALTA MU MAURITIUS MV MALDIVES MW MALAWI MX MEXICO MY MALAYSIA MZ MOZAMBIQUE NA NAMIBIA NC NEW CALEDONIA NE NIGER NF NORFOLK ISLAND NG NIGERIA NI NICARAGUA NL NETHERLANDS NO NORWAY NP NEPAL NR NAURU NU NIUE NZ NEW ZEALAND OM OMAN PA PANAMA PE PERU PF FRENCH POLYNESIA PG PAPUA NEW GUINEA PH PHILIPPINES PK PAKISTAN PL POLAND PM SAINT PIERRE AND MIQUELON PN PITCAIRN PS PALESTINIAN TERRITORY, OCCUPIED PT PORTUGAL PW PARAGUAY RW RWANDA SA SAUDI ARABIA SB SOLOMON ISLANDS SC SEYCHELLES SD SUDAN SE SWEDEN SK SLOVAKIA	MP	NORTHERN MARIANA ISLANDS
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SH SAINT HELENA SI SLOVENIA SJ SVALBARD AND JAN MAYEN SK SLOVAKIA	SE	SWEDEN
SI SLOVENIA SJ SVALBARD AND JAN MAYEN SK SLOVAKIA	SG	SINGAPORE
SJ SVALBARD AND JAN MAYEN SK SLOVAKIA	SH	SAINT HELENA
SK SLOVAKIA	SI	SLOVENIA
	SJ	SVALBARD AND JAN MAYEN
SL SIERRA LEONE	SK	SLOVAKIA
	SL	SIERRA LEONE
SM SAN MARINO	SM	SAN MARINO
SN SENEGAL	SN	SENEGAL

Country Code	Country Name
SO	SOMALIA
SR	SURINAME
ST	SAO TOME AND PRINCIPE
SV	EL SALVADOR
SY	SYRIAN ARAB REPUBLIC
SZ	SWAZILAND
TC	TURKS AND CAICOS ISLANDS
TD	CHAD
TF	FRENCH SOUTHERN TERRITORIES
TG	TOGO
TH	THAILAND
TJ	TAJIKISTAN
TK	TOKELAU
TM	TURKMENISTAN
TN	TUNISIA
TO	TONGA
TP	EAST TIMOR
TR	TURKEY
TT	TRINIDAD AND TOBAGO
TV	TUVALU
TW	TAIWAN, PROVINCE OF CHINA
TZ	TANZANIA, UNITED REPUBLIC OF

Country Code	Country Name
UA	UKRAINE
UG	UGANDA
UM	UNITED STATES MINOR OUTLYING ISLANDS
US	UNITED STATES
UY	URUGUAY
UZ	UZBEKISTAN
VA	HOLY SEE (VATICAN CITY STATE)
VC	SAINT VINCENT AND THE GRENADINES
VE	VENEZUELA
VG	VIRGIN ISLANDS, BRITISH
VI	VIRGIN ISLANDS, U.S.
VN	VIET NAM
VU	VANUATU
WF	WALLIS AND FUTUNA
WS	SAMOA
YE	YEMEN
YT	MAYOTTE
YU	YUGOSLAVIA
ZA	SOUTH AFRICA
ZM	ZAMBIA
ZW	ZIMBABWE