

2024

Pennsylvania

Hazardous Waste Regulation
Compliance Guide

Hazardous Waste Generator Requirements



Table of Contents

1. What Is This Guide About?	1
2. Do the Hazardous Waste Generator Standards Apply to You?	2
2.1 Defining Hazardous Waste	2
2.2 Identifying Your Waste	3
2.3 Finding Your Generator Category	4
3. Hazardous Waste Generator Improvements Rule (GIR)	6
3.1 LQG Consolidation of VSQG Waste	6
3.2 Episodic Generation	6
3.3 Notification of LQG Site Closure for a Central Accumulation Area (CAA) or Entire Facility	7
3.4 Notification of Hazardous Secondary Material (HSM) Activity	7
4. What Requirements Apply to Large and Small Quantity Generators?	8
4.1 Obtaining an EPA Identification Number	9
4.2 Accumulating Hazardous Waste on Site	9
4.3 Satellite Accumulation Areas	10
4.4 90- or 180-Day Accumulation	10
4.5 Accumulating Hazardous Waste in Qualified Units	11
4.6 Preparing for Emergencies	11
4.7 Preparedness and Prevention	12
4.8 Emergency Procedures	12
4.9 Training Personnel	14
5. Which Hazardous Waste Shipping Requirements are Applicable to Large and Small Quantity Generators?	16
5.1 Manifesting Offsite Shipments	17
5.2 Complying with the Land Disposal Restrictions	20
5.3 Recordkeeping and Reporting of your Hazardous Waste Activities	20
5.3.1 Keeping Records of Hazardous Waste Activities	20
5.3.2 Reporting the Hazardous Waste Activities	21
5.4 Preparing and Following a Source Reduction Strategy	21
5.5 Shipping Hazardous Waste Internationally	22
Glossary	23
Appendix I: Typical Wastes Generated by Large and Small Quantity Generators	25
Appendix II: Requirements That Apply to Very Small Quantity Generators	26

Appendix III: Checklist of Generator Requirements	27
Appendix IV: Sources of Information for Generators.....	32
Appendix V: Summary of Requirements Applicable to the Onsite Accumulation of Hazardous Waste in Containers and Tanks	35
Appendix VI: Emergency Response Worksheet for Small Quantity Generators	37

1. What Is This Guide About?

This guide describes the requirements that apply to generators of hazardous waste under the Commonwealth's hazardous waste regulations. The guide first describes how to determine if you generate a hazardous waste, and if you do, what generator category applies to you. The regulations apply to three categories of generators: large quantity generators (LQGs), small quantity generators (SQGs) and very small quantity generators (VSQG). Each category is regulated according to a specific set of rules. This guide is intended primarily to assist businesses that qualify as LQGs and SQGs, and it also includes an appendix that describes the VSQG requirements. However, to make generator compliance determinations, please refer to the federal and state regulations referenced throughout this guide, when applicable.

Federal agencies administer numerous federal statutes applicable to hazardous waste management activities. The Resource Conservation and Recovery Act (RCRA) (42 U.S.C.A. §§ 6901-6992) and federal regulations in 40 CFR Parts 260-279 contain the basic requirements of the federal hazardous waste program administered by the U.S. Environmental Protection Agency (EPA). Under RCRA, EPA may delegate authority to the states to administer and enforce the RCRA program in lieu of EPA. A state's program must be equivalent to, and at least as stringent as, the federal program. In 1986, the Department of Environmental Protection (DEP) received initial authorization from EPA to administer the RCRA program within the Commonwealth.

The initial authorization has been updated several times since then. The Commonwealth's hazardous waste regulations are found in Title 25 of the Pennsylvania Code and incorporate most of the federal regulations by reference. "Incorporation by reference" means that the federal regulations act as DEP's regulations, except where DEP has modified the federal requirements for Pennsylvania.

Because the Commonwealth has incorporated by reference most of the federal regulations that apply to generators of hazardous waste, this document describes many requirements by referring to the appropriate federal regulations (e.g., 40 CFR Part 262). However, DEP made additions or modifications to some of the federal regulations, and the added or modified regulatory language appears in the Pennsylvania Code. These modified requirements are referenced in this document by their Pennsylvania Code citations and, where appropriate, by their corresponding 40 CFR citations. The PA-specific citations are noted with the letter "a" (or sometimes "b") after the chapter number, for example Chapter 262a. Federal requirements incorporated by reference without modification are referenced using a 40 CFR citation.

On May 30, 2017, EPA adopted the Hazardous Waste Generator Improvements Rule (GIR). The key changes to this rule are outlined in Section 3. One of the primary objectives of this rule is to consolidate most of the generator requirements into Part 262 to reduce cross references to Parts 261 and 265.

On June 30, 2018, EPA launched a national system for tracking hazardous waste shipments electronically called "e-Manifest." Hazardous waste sent offsite should be entered or submitted through the e-Manifest system unless the hazardous waste is exported outside of the country. e-Manifest will modernize the nation's cradle-to-grave hazardous waste tracking and save valuable time, resources, and dollars for industry and states. Further details regarding e-Manifest can be found in Section 5.

2. Do the Hazardous Waste Generator Standards Apply to You?

To determine if the generator standards apply to your business, you must first determine if your specific waste streams are hazardous. If you do generate a hazardous waste, you must determine your generator category and comply with the applicable standards (see Exhibit 1).

2.1 Defining Hazardous Waste

40 CFR Part 261 – Identification and Listing of Hazardous Waste

The regulations in 40 CFR Part 261 include a two-pronged approach to determine if a material qualifies as a hazardous waste: 1) the material must first qualify as a solid waste, 2) then as a hazardous waste. A solid waste is any solid, liquid or contained gaseous material that is discarded by being abandoned (e.g., disposed of or incinerated), recycled in specified ways or is inherently waste-like. (Note: This definition of solid waste is applicable only for determining if a material is a hazardous waste. In all other situations, the statutory definition of solid waste applies.) In general, a solid waste qualifies as hazardous if it satisfies one or both of the following criteria:

- It appears on one of four lists published by EPA in 40 CFR Part 261, Subpart D:
 - **Non-specific source wastes (40 CFR 261.31)** include generic wastes commonly produced by industry. Examples include spent halogenated solvents used in degreasing and wastewater treatment sludge from electroplating processes, as well as dioxin wastes, most of which are “acutely hazardous” wastes due to the risks they pose to human health and the environment.
 - **Specific source wastes (40 CFR 261.32)** include wastes from specifically identified industries, such as wood preserving, petroleum refining and organic chemical manufacturing. Examples include sludges, still bottoms, wastewaters, spent catalysts and residues.
 - **Commercial chemical products acute or extremely hazardous (40 CFR 261.33(e))** include discarded commercial chemical products, off-specification commercial chemical products, manufacturing chemical intermediates and container residues and spills of these materials. This list includes those identified as **acute or extremely hazardous**. Examples include tetraethyl lead, soluble cyanide salts, phosgene, and acrolein.
 - **Commercial chemical products toxic (40 CFR 261.33 (f))** include discarded commercial chemical products, off-specification commercial chemical products, manufacturing chemical intermediates and container residues and spills of these materials. This list includes those identified as **toxic**. Examples include chemicals such as chloroform and creosote; acids such as hydrofluoric acid and sulfuric acid; and pesticides, such as DDT and kepone.
- It exhibits a hazardous characteristic specified in 40 CFR Part 261, Subpart C. EPA has identified four hazardous characteristics:
 - **Ignitability (40 CFR 261.21)** is the ability of wastes to catch fire under certain conditions. Examples are paints, certain degreasers and solvents. Ignitable wastes have an EPA waste code D001.
 - **Corrosivity (40 CFR 261.22)** is the ability of wastes to corrode metals or wastes that have a very high or low pH. Examples are rust removers, acid or alkaline cleaning fluids and battery acid. Corrosive wastes have an EPA waste code D002.

Exhibit 1

Determining if the Generator Standards Apply to You

First, determine if you generate a hazardous waste.

- Measure the amount of hazardous waste you generate per month.
- Determine your generator category to learn which regulations apply to you.

- **Reactivity (40 CFR 261.23)** means wastes are unstable and explode or produce toxic fumes, gases and vapors when mixed with water or when subjected to heat or pressure. Examples include certain cyanides or sulfide-bearing wastes. Reactive wastes have an EPA waste code D003.
- **Toxicity (40 CFR 261.24)** includes wastes that are harmful or fatal when ingested or absorbed or leach toxic chemicals into the soil or groundwater when disposed on land. Examples include wastes that contain high concentrations of heavy metals, such as cadmium, lead or mercury. EPA waste codes for toxic wastes range from D004 to D043.

See 40 CFR Part 261, EPA's *Criteria for the Definition of Solid Waste and Solid and Hazardous Waste Exclusions* at <https://www.epa.gov/hw/criteria-definition-solid-waste-and-solid-and-hazardous-waste-exclusions> , for an in-depth description of the definition of hazardous waste.

2.2 Identifying Your Waste

40 CFR 262.11 – Criteria for Listing Hazardous Waste

To determine if your waste is hazardous, you must follow the steps set forth in 40 CFR 262.11. Specifically, you must determine if the waste:

- Is excluded from regulation under 40 CFR 261.4;
- Is listed as a hazardous waste in 40 CFR Part 261, Subpart D; or
- Exhibits a hazardous characteristic identified in 40 CFR Part 261, Subpart C. The characteristics can be identified either by testing the waste or by using your knowledge of the waste. Note that if your wastes are to be land disposed (e.g., landfilled), you must also determine if they exhibit a hazardous characteristic, even if they are listed wastes. Under the Land Disposal Restrictions (LDR) program, most hazardous wastes may not be land disposed until they meet specified treatment standards. (Refer to 40 CFR Part 268 for the LDR program.) A later section of this handbook summarizes the basic LDR requirements that apply to generators (Section 5.2).

Exhibit 2

Identifying Your Hazardous Waste

The Safety Data Sheet (SDS) associated with your discarded material is helpful in identifying its hazardous characteristics. You can also contact the product's supplier or a trade association to assist with proper classification of your waste.

To help you characterize your waste streams under 40 CFR 262.11, consult the table in Appendix I to find a list of some typical hazardous wastes generated by businesses. Refer to Exhibit 2 for other sources to help you characterize your waste. If your waste is listed or exhibits a hazardous characteristic, you will need to manage it according to appropriate federal and state regulations.

2.3 Finding Your Generator Category

40 CFR 262.13 – Generator Category Determination

Once you know that you generate hazardous waste, you need to measure the total amount of hazardous waste you generate each month in accordance with 40 CFR 262.13.

Section 262.13 describes the types of wastes that should be included in, and excluded from, your measurements. The amount of hazardous waste you generate each month determines your generator category for that month (See Table 1). Exhibit 3 provides a helpful tip for measuring your waste quantity. The Commonwealth's regulations include three generator categories, each of which is regulated differently:

- **Very Small Quantity Generator (VSQG).** You are considered a VSQG if, in a calendar month, you generate no more than 100 kilograms (220 pounds) of hazardous waste in that month. You are subject to the requirements of 40 CFR 262.14 and 25 Pa. Code 262a.14 for that waste and, except as otherwise specified in Section 262.14, you are not subject to 25 Pa. Code Chapters 262a through 266a, 268a, 270a or the notification requirements of Section 3010 of RCRA. Please note that there is a new provision under 40 CFR 262.14(a)(5)(viii) that allows for VSQG consolidation by a Large Quantity Generator within the same company. Refer to Appendix II for a summary of the VSQG requirements. (Although VSQGs are not subject to the generator requirements at 25 Pa. Code Chapter 262a or 40 CFR Part 262 for their exempt waste, DEP encourages VSQGs to follow these requirements, where appropriate, to minimize the potential for leaks and spills.)
- **Small Quantity Generator (SQG).** You are considered an SQG if you generate less than or equal to one kilogram of acute hazardous waste and greater than 100 kilograms (220 pounds), but less than 1,000 kilograms (2,200 pounds) of non-acute hazardous waste in a calendar month. SQGs are subject to the generator standards found at 40 CFR Part 262 (Section 262.16) and 25 Pa. Code Chapter 262a and 40 CFR Part 268, as applicable.
- **Large Quantity Generator (LQG).** You are considered an LQG if you generate 1,000 kilograms (2,200 pounds) or more of hazardous waste in a calendar month. You also are considered an LQG if you generate during a calendar month, or accumulate at any time, more than one kilogram of acute hazardous waste, or more than a total of 100 kilograms (220 pounds) of any residue, contaminated soil, waste or debris from cleaning up a spill of any acutely hazardous waste onto land or into water. LQGs are subject to the generator standards found at 40 CFR Part 262 (Section 262.17) and 25 Pa. Code Chapter 262a and 40 CFR Part 268, as applicable.

VSQGs and SQGs can maintain their existing generator categories in the case of either a planned or unplanned episodic generation event in which a VSQG or SQG generates a quantity of hazardous waste in a calendar month that would otherwise classify the facility in a higher generator category. This new provision for episodic generation is cited under 40 CFR Part 262, Subpart L. Under certain conditions that are described in 40 CFR 262.232, the generator does not have to comply with the more stringent generator category standards when an episodic event, such as a cleanout or an act of nature, would otherwise cause its generator status to temporarily increase. (See Section 3.2 for more information.)

Exhibit 3

Measuring Your Waste Quantity

Hazardous wastes are generally measured in kilograms or pounds (100 kg ≈ 220 lbs.). Many hazardous wastes, however, are liquids with the quantity measured in gallons. To convert from gallons to kilograms you must know the density of the liquid. A rough guide is that about a half of a 55-gallon drum of waste with a density similar to water has a mass of about 100 kg, or 220 lbs.

Table 1. Generator Categories Based on Quantity of Waste Generated in a Calendar Month (§262.13)

Quantity of acute hazardous waste generated in a calendar month	Quantity of non-acute hazardous waste generated in a calendar month	Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month	Generator Category
> 1 kg	Any amount	Any amount	Large Quantity Generator
Any amount	≥ 1,000 kg	Any amount	Large Quantity Generator
Any amount	Any amount	> 100 kg	Large Quantity Generator
≤ 1 kg	> 100 kg and < 1,000 kg	≤ 100 kg	Small Quantity Generator
≤ 1 kg	≤ 100 kg	≤ 100 kg	Very Small Quantity Generator

3. Hazardous Waste Generator Improvements Rule (GIR)

On November 28, 2016, EPA promulgated a final rulemaking that made significant changes to the hazardous waste generator regulations, consolidating most of the generator requirements into Part 262 to reduce cross references to Parts 261 and 265. EPA also used the preamble to its rule to provide significant guidance and best management practices (BMPs) for hazardous waste generators. The rule (GIR) includes over 60 changes to the hazardous waste regulations that make the hazardous waste regulations easier to understand and provide greater flexibility in managing hazardous waste. The GIR became effective in PA on May 30, 2017. This section will cover four of the main changes implemented with this rule change: LQG consolidation of VSQG waste, episodic generation, notification of LQG site closure for a central accumulation area (CAA) or entire facility, and notification of hazardous secondary material (HSM) activity.

3.1 LQG Consolidation of VSQG Waste

40 CFR 262.17 (f)

This addition to the regulations provides VSQGs with the option to ship hazardous waste without a manifest to an LQG that is under the same control as the VSQG. Under this provision VSQGs must mark their containers with the term “Hazardous Waste” and an indication of the hazards associated with the contents.

The LQG must:

1. Notify EPA using Form 8700-12 at least 30 days prior to receiving first shipment from VSQGs.
2. Maintain records of waste shipments from VSQGs for at least 3 years.
3. Mark the containers with the date the hazardous waste was received.
4. Manage the waste received from the VSQGs under the regulations applicable to LQGs (including reporting the waste received from VSQGs on biennial reports). This excludes satellite accumulation areas (SACs).

Note that the provision allowing a VSQG to ship hazardous waste to an LQG without a manifest does not eliminate the need for United States Department of Transportation (DOT) compliance. Any waste that meets DOT’s definition of hazardous is still subject to DOT’s requirements regarding packaging, marking, labeling, placarding and shipping.

3.2 Episodic Generation

40 CFR 262 Subpart L

This provision in Part 262 Subpart L allows VSQGs and SQGs to remain classified at their existing generator category when they temporarily generate additional volumes of hazardous waste because of an episodic event. In the past, generators who undergo events such as facility cleanouts would be bumped into the higher generator category. Under the new GIR, if generators satisfy specific conditions, they can remain in their current generator category. The relief for an episodic event is only allowed once per calendar year. To take advantage of the episodic generation provision, the following conditions must be met, including but not limited to:

1. The generator must notify EPA using form 8700-12 no later than 30 days before a planned episodic event or within 72 hours after an unplanned event.
2. Hazardous waste generated during an episodic event must be manifested to an offsite RCRA-designated facility within 60 days after the start of the event.
3. Records of the event must be kept for 3 years from the end date of the episodic event.

3.3 Notification of LQG Site Closure for a Central Accumulation Area (CAA) or Entire Facility

40 CFR 262.17 (a)(8)(i)

GIR requires LQGs to notify EPA no later than 30 days prior to closing their facility using the 8700-12 form for site closures. LQGs must comply with the closure performance standards of 40 CFR 262.17 (a)(8)(iii) or 40 CFR 262.17 (a)(8)(iv) and notify EPA within 90 days after closing the facility. Notifications required are: indication of whether you are closing a central accumulation area (CAA) or the entire facility, expected closure date, and final date closed. If you need additional time for a site closure, you can request additional time and specify why you are requesting additional time.

3.4 Notification of Hazardous Secondary Material (HSM) Activity

40 CFR 260.42

GIR requires facilities to notify by submitting an 8700-12 form under 40 CFR 260.42 that you will begin managing, are still managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a) (23), (24), or (27). A notification is also required if the facility is submitting a legitimate recycling notification under 40 CFR 260.43(a)(4)(iii).

4. What Requirements apply to Large and Small Quantity Generators?

The hazardous waste regulations establish a system for managing hazardous wastes from “cradle-to-grave” – i.e., from the point of generation through final disposal. Hazardous waste generators are the first link in the system. As discussed in Chapter 2 of this guide, you must first determine if you generate a hazardous waste and identify the generator category that applies to you. If you are an LQG or SQG, you must follow the hazardous waste generator standards found in 25 Pa. Code Chapter 262a, including the federal regulations referenced therein. If you intend to dispose of your hazardous waste in or on the land (e.g., in a landfill), you also must comply with the Land Disposal Restrictions of 40 CFR Part 268.

The following paragraphs describe the basic requirements and procedures that apply to LQGs and SQGs. These requirements are summarized in Exhibit 4. (Chapter 2 describes the 40 CFR 262.11 requirements for identifying your hazardous waste.) See Appendix III for a checklist to assist you in complying with these regulations and Appendix IV for a list of some sources available for obtaining additional information or materials on the Commonwealth’s regulations.

Exhibit 4

Primary Requirements for LQGs and SQGs under the Commonwealth's Hazardous Waste Regulations

- Identify your hazardous waste (40 CFR 262.11).
- Obtain an EPA identification number (25 Pa. Code Chapter 262a.18 and 40 CFR 262.18).
- Accumulate your waste onsite according to specified standards (40 CFR 262.16-17):
 - Using acceptable units and equipment, processes and procedures.
 - Preparing for emergencies at your site.
 - Ensuring your personnel are knowledgeable of your operations, wastes handled, and emergency response procedures.
- Properly prepare your hazardous waste for shipment offsite (e.g., proper packaging and labeling) (40 CFR 262.30-262.33).
- Prepare, transmit and keep copies of manifests that accompany your offsite shipments (25 Pa. Code Chapter 262a, Subchapter B and 40 CFR Part 262 Subpart B).
- Comply with the Land Disposal Restrictions (40 CFR Part 268) if you intend to dispose of your waste in or on land.
- Keep records of your hazardous waste activities and submit reports to DEP, as specified (25 Pa. Code Chapter 262a, Subchapter D and 40 CFR Part 262, Subpart D).
- Prepare and follow a source reduction strategy (25 Pa. Code Chapter 262a, Subchapter I).
- Follow the rules for international shipments, if applicable (40 CFR Part 262, Subparts E, F, and H).

4.1 Obtaining an EPA Identification Number

40 CFR 262.18 and 25 Pa. Code 262a.18

If you generate, treat, store, dispose of, transport or offer for transportation any hazardous waste, you must obtain an EPA identification (ID) number according to 40 CFR 262.18 and 25 Pa. Code 262a.18. DEP will assign a unique 12-character number to your location. EPA and states use ID numbers to monitor hazardous waste activities in Pennsylvania and across the country. For example, you will need to use your ID number when you send waste offsite to be managed. You also are prohibited from transferring hazardous waste to any transporter or a treatment, storage or disposal facility (TSDF) that does not also have an EPA ID number. You may obtain an EPA ID number by completing EPA Form 8700-12, Site Identification Form. This form can be found at: [<https://www.epa.gov/hwgenerators/how-hazardous-waste-generators-transporters-and-treatment-storage-and-disposal>]. This form has been updated to incorporate changes from the GIR. You should complete one copy of the form for each site where you generate or handle hazardous waste. Each site will receive its own EPA ID number. (If your site has more than one ID number, you should contact DEP at 717-787-6239 or RA-HazWaste@pa.gov to see if one or more of them should be deactivated.)

Pursuant to PA 25 Pa. Code 262a.18, you must submit a subsequent notification to DEP if:

- Your generator activity moves to another location.
- Your company name or designated contact person changes.
- Ownership of your generator facility changes.
- The type of regulated activity that takes place at your generator facility changes.
- The name of the facility changes.
- Changes to the GIR (see Section 3) require notifications for:
 - Recycling of Hazardous Secondary Material
 - LQG Consolidation of VSQGs Hazardous Wastes
 - Episodic Generation
 - LQG site closure for a central accumulation area (CAA) or entire facility.
 - Your generator category changes, except when the category change is temporary.

4.2 Accumulating Hazardous Waste Onsite

40 CFR §§ 262.15 – 262.17

Under RCRA's satellite accumulation area requirements of 40 CFR 262.15 for SQGs and LQGs, you may accumulate your hazardous waste at or near the initial point of generation (e.g., in a 55-gallon drum next to your parts cleaning unit) if you meet certain criteria (e.g., quantity limits). Once you remove your waste from satellite accumulation, you must take it directly to an area at your site that is specially designed and maintained to accumulate your waste until shipment offsite (e.g., central accumulation area). This type of waste accumulation is subject to 40 CFR 262.16(b) or 262.17(a), as applicable. Among other things, Sections 262.16(b) and 262.17(a) provide that SQGs and LQGs have up to 180 or 90 days, respectively, to ship their hazardous waste from the accumulation area to a TSDF. In the following paragraphs, we describe the specific requirements that apply to satellite accumulation areas and 90/180-day accumulation areas.

4.3 Satellite Accumulation Areas

Under 40 CFR 262.15, you may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste in containers at or near the point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste.

In addition, the containers used to accumulate your waste must be:

- Marked with the words “Hazardous Waste” and an indication of the hazards of the contents (i.e., ignitable, corrosive, reactive, toxic);
- Maintained in good condition (e.g., to avoid leaks);
- Constructed of material compatible with the waste being stored; and
- Kept closed during storage, except when adding or removing waste.

If you exceed the 55-gallon limit at the satellite accumulation area, you must remove the excess amount within three calendar days of exceeding the limit. You must transfer the excess amount of waste to a 180-day or 90-day accumulation area subject to 40 CFR 262.16(b) or 262.17(a).

During the three-day period, the containers used to hold the excess quantity of waste must meet the four bulleted criteria above. The containers also must be marked with the date the excess amount began accumulating.

- You should always transfer all your hazardous waste from satellite accumulation to a 90-day or 180-day accumulation area within one year of accumulating it. If you accumulate hazardous waste in a satellite accumulation area for more than one year, you could be considered a disposal facility and would be subject to the permitting requirements of 25 Pa. Code Chapter 270a and 40 CFR Part 270.

4.4 90- or 180-Day Accumulation

40 CFR 262.16(b) and 262.17(a) establish the basic procedures that generators must follow to accumulate their hazardous waste onsite before shipment to a TSD. LQGs can accumulate their hazardous waste onsite for 90 days or less if they meet the requirements of 40 CFR 262.17(a). SQGs can accumulate their hazardous waste onsite for 180 days or less, provided the quantity of waste accumulated onsite never exceeds 6,000 kilograms and the SQGs meet the other requirements of 40 CFR 262.16(b). SQGs who must transport their waste, or offer their waste for transportation, over 200 miles or more for offsite treatment, storage or disposal may accumulate hazardous waste onsite for 270 days or less, as provided by 40 CFR 262.16(c).

An LQG who exceeds the 90-day accumulation timeframe, or an SQG who exceeds the 180/270-day timeframe, or who exceeds the 6,000-kilogram accumulation quantity limit, is considered an operator of a storage facility. The generator is then subject to the requirements of 25 Pa. Code Chapters 264a, 265a and 270a, and 40 CFR Parts 264, 265, 267, 268 and 270, unless DEP grants an extension.

If you expect to exceed the prescribed time frame for accumulation, you can request an extension from DEP. DEP may grant the extension if your hazardous waste must remain onsite for longer than 90 days (for LQGs) or 180/270 days (for SQGs) due to unforeseen, temporary or uncontrollable circumstances. At our discretion, and within the limits of the regulations, we may grant an extension of as long as 30 days on a case-by-case basis.

In the following paragraphs, we describe the waste accumulation requirements that apply to SQGs and LQGs under 40 CFR 262.16(b) and 262.17(a). It is important to note that 40 CFR 262.17(a) requires LQGs to comply with Subparts AA, BB and CC, which relate to air emission standards.

Table 2. Satellite Accumulation vs. Central Accumulation Areas

Container Requirement	Satellite Accumulation Containers	SQG Central Accumulation Area	LQG Central Accumulation Area
Labeled with "Hazardous Waste"	Y	Y	Y
Labeled with accumulation start date	N	Y	Y
Compatible with substance stored and good condition	Y	Y	Y
Weekly inspections	N	Y	Y
Secondary Containment	N	Y	Y
Closed always, except when adding or removing wastes	Y	Y	Y
Closure when no longer receiving hazardous waste	N	N	Y
Part 264/265, Subparts AA, BB and CC are applicable	N	N	Y
Emergency preparedness, prevention, contingency plan	Y	Y	Y

N = No, not required; Y = Yes, required.

4.5 Accumulating Hazardous Waste in Qualified Units

Under 40 CFR 262.16(b) and 262.17(a), you must ensure that the units and equipment (containers, tanks) used to accumulate your hazardous waste under the 90-day or 180/270-day accumulation timeframe are designed, constructed, operated and eventually closed (tanks) in accordance with the applicable requirements of 25 Pa. Code Chapter 265a and 40 CFR Part 265 Subparts I and J. SQGs and LQGs may accumulate their hazardous waste in containers, tanks, drip pads or containment buildings, provided they meet the requirements of 40 CFR 262.16(b) and 262.17(a). In addition, you must keep records of your waste accumulation activities (e.g., labels on containers showing the initial date of accumulation, weekly inspection logs and employee training records) onsite, as required by 40 CFR 262.16(b) and 262.17(a).

In Appendix V, we summarize the basic requirements that generators must follow in accumulating their waste in the units identified above. You should refer to 40 CFR 262.16 and 262.17, 25 Pa. Code Chapter 265a and 40 CFR Part 265, as appropriate, to find the full regulations that apply to your accumulation units and operations.

4.6 Preparing for Emergencies

Under 40 CFR 262.16(b)(8), SQGs must be prepared for, and take appropriate actions in response to, emergencies at your site (e.g., explosions, fires and releases). 40 CFR 262.17(a) requires LQGs to follow the 40 CFR Part 262, Subpart M requirements, relating to Preparedness, Prevention, and Emergency Procedures for LQGs, for ensuring their sites are safe and protective of human health and the environment (e.g., equipped with relevant emergency response equipment). In addition, 40 CFR 262.260 requires LQGs to follow the contingency planning and emergency procedures of 40 CFR 262.261 (content of a contingency plan). SQGs, on the other hand, must follow the emergency procedures that are listed in 40 CFR 262.16(b)(8) and (9).

4.7 Preparedness and Prevention

40 CFR 262.16(b)(8) and (9) and 262.17(a)(6) provide that SQGs and LQGs, respectively, must follow the preparedness and prevention requirements, further described in these sections, and in part state that your site be designed, constructed, maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste that could threaten human health or the environment. Among other things, you must maintain sufficient aisle space to allow the unobstructed movement of personnel and emergency response equipment to any area of the facility where waste is accumulated, unless such aisle space is not needed.

In addition, you must maintain required emergency response equipment on site and ensure, through testing and maintenance, that the equipment will operate properly during an emergency. You also must ensure that all personnel have immediate access to an internal alarm or emergency communications device whenever they are handling (e.g., pouring or mixing) hazardous waste. If there is ever just one employee at the site while the facility is operating, the employee must have immediate access to a communications device (e.g., telephone) capable of summoning external emergency assistance. Finally, you must attempt to make arrangements with local police and fire departments, hospitals and emergency response teams to familiarize them with your site (e.g., layout, work areas, operations), potential hazards, wastes generated and handled and the potential need for their services. You also must try to enter into agreements with local police, fire departments and emergency response personnel (e.g., contractors and equipment suppliers), as appropriate, to ensure effective coordination and response to emergencies.

The generator requirements for preparedness and prevention are summarized in Exhibit 5.

4.8 Emergency Procedures

Both LQGs and SQGs must keep written procedures on site to help them respond to emergencies. Because LQGs generate more waste than SQGs, LQGs are required to undertake more emergency response planning. 40 CFR 262.17(a)(6) requires LQGs to prepare and follow a written contingency plan in accordance with Subpart M of 40 CFR Part 262. SQGs, on the other hand, must follow the emergency procedures spelled out under 40 CFR 262.16(8) and (9).

Under Subpart M of 40 CFR Part 262, LQGs are required to develop and maintain a formal contingency plan on site. The plan must include the emergency procedures that will be implemented in the event of an emergency and other information as required by 40 CFR 262.261 and 262.265. LQGs must revise the plan if it fails in an emergency or if specified types of changes occur at the site (e.g., a new emergency coordinator is designated) and provide it to local authorities (e.g., police and fire departments) who might be called upon to provide emergency services. (See also 40 CFR 262.263)

Exhibit 5

Preparedness and Prevention Procedures

40 CFR Part 262.16(8) and (9) and 262.17(a)(6)

- Design, construct, operate, and maintain your site in a protective manner.
- Equip your site with readily accessible emergency equipment and supplies (e.g., internal alarm system, communication device, fire and spill control equipment).
- Ensure adequate aisle space in the waste accumulation area at your facility (e.g., between containers and drums) to allow easy access.
- Make arrangements with local emergency response authorities (e.g., police and fire departments) for dealing with emergencies.

In addition to the existing requirement for an LQG to prepare and submit a contingency plan, the Hazardous Waste Generator Improvement Rule requires an LQG to prepare a 'quick reference guide' (40 CFR 262.262(b)). The purpose of the quick reference guide is to provide the most critical information for first responders so they may respond appropriately in the event of an emergency. The quick reference guide contains the following elements:

- Types/names of hazardous waste and associated hazards.
- Estimated maximum amounts of hazardous wastes onsite at any one time.
- Identification of hazardous waste that, if exposed, would require special medical treatment.
- Map showing where hazardous wastes are generated, accumulated and/or treated; including access routes for wastes.
- Map of facility showing street access and evacuation routes.
- Locations of water supply (e.g., fire hydrant and flow rate).
- Identification of onsite notification systems (e.g., fire alarm that rings offsite, smoke alarms).
- Name of emergency coordinator(s) and 24-hour/7-day emergency telephone number(s).

LQGs must update their quick reference guides whenever the contingency plan is amended and submit these documents to local emergency responders.

For guidance on developing a contingency plan, you should consult the Integrated Contingency Plan Guidance, published in the *Federal Register*, 61 FR 28642-75, June 5, 1996, or *Guidelines for the Development and Implementation of Environmental Emergency Response Plans*, August 6, 2005 [Document ID: 400-2200-001], available online from DEP.

In addition, LQGs must ensure that, at all times, at least one employee either at the site or on call is responsible for coordinating all emergency response measures (i.e., an emergency coordinator, see 40 CFR 262.264). Whenever an imminent or actual emergency occurs, the LQG's emergency coordinator (or designee) must follow the emergency procedures in its contingency plan. Exhibits 6 and 7 identify emergency procedures for LQGs.

SQGs are not required to develop a written contingency plan for emergencies. Rather, they are required to follow the procedures in 40 CFR 262.16(b)(8) and (9) (see Exhibit 8). Specifically, SQGs must ensure that, at all times, at least one employee on the premises or on call is responsible for coordinating all emergency response measures (i.e., the emergency coordinator). This individual also must post emergency response information next to the telephone. (Refer to 40 CFR 262.16(b)(9)(ii) and Appendix VI of this guide for additional detail. SQGs also must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

Exhibit 6

Emergency Procedures for LQGs

Subpart M of 40 CFR Part 262

- Designate emergency coordinator(s).
- Prepare and maintain contingency plan and quick reference guide that includes:
 - Procedures for responding to emergencies;
 - Arrangements with local emergency response authorities;
 - List of names, addresses, and phone numbers of emergency coordinators;
 - List of emergency equipment; and
 - Evacuation plan, if needed.
- Follow the contingency plan in response to imminent or actual emergencies.
- Update the contingency plan and quick reference guide as required.

Finally, in response to an emergency, the emergency coordinator must follow the procedures listed at 40 CFR 262.265:

- For fires, call the fire department and/or try to extinguish it.
- For spills, contain the flow of hazardous waste to the extent possible and, as soon as practicable, clean up the hazardous waste and any contaminated materials or soils.
- For a fire, explosion or other release that can threaten areas outside the facility or for a spill that has reached surface water, immediately notify the National Response Center and the appropriate regional DEP office or DEP's Central Office.

Please refer to Appendix VI for a sample Emergency Response Worksheet for SQGs.

4.9 Training Personnel

The regulations require generators to ensure that their employees are knowledgeable about the possible dangers of the hazardous wastes at the site, can safely carry out their day-to-day job responsibilities and can take appropriate emergency response actions if needed.

LQGs must follow the personnel training requirements of 40 CFR 265.17(a)(7), which require that LQGs ensure that their employees complete a program of classroom instruction or on-the-job training that teaches them how to perform their jobs in a safe and compliant manner.

The program must be directed by a qualified individual and include the training elements described in 40 CFR 265.17(a)(7)(i). In addition, employees must successfully

complete the training program within six months of being hired or assigned to the position and must take part in an annual review of the training. Employees must not work in unsupervised positions until they have completed the training program. Finally, LQGs must maintain records of their training program, as provided at 40 CFR 265.17(a)(7)(iv). See Exhibit 9 for a summary of these requirements.

Exhibit 7

Notifying Authorities of Emergencies

In response to emergencies, LQGs must notify:

- Local authorities (e.g., police and fire departments), as relevant.
- DEP's Regional Office 24-hours/7-days/week Emergency Response Phone Number – See Appendix IV for a map with emergency phone numbers based on your location. DEP's Statewide Emergency Response Hotline is 800-541-2050.
- The National Response Center at (800) 424-8802 for spills in surface water or for a release that threatens human health or the environment beyond the site boundary.

Exhibit 8

Emergency Procedures for SQGs

40 CFR 262.16(b)(9)

- Designate an emergency coordinator.
- Post emergency response information next to the telephone. [See Appendix VI for template.]
- Familiarize employees with waste handling and emergency procedures, as appropriate.
- Follow the emergency response procedures of Section 262.(b)(9)(iv) for a fire, explosion, or release.

SQGs are not required to implement a training program. However, SQGs must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies, as required under 40 CFR 262.16(8) and (9). For example, SQGs may ask their employees to review the Safety Data Sheets (SDSs) of chemicals frequently used at the site and to familiarize themselves with emergency response procedures (e.g., contacting emergency response personnel and using alarms and communications devices, as appropriate).

Exhibit 9

Elements of Training Program for LQGs

40 CFR 265.17(a)(7)

- Procedures for safe management of hazardous waste, e.g.:
 - Labeling of containers; and
 - Conducting inspections.
- Procedures for emergency response, including:
 - Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
 - Key parameters for automatic waste feed cut-off systems;
 - Communications or alarm systems;
 - Response to fires, explosions, and groundwater contamination; and
 - Shutdown of operations.

5. Which Hazardous Waste Shipping Requirements are Applicable to Large and Small Quantity Generators?

40 CFR Part 262.30-262.33

In creating the RCRA regulations, EPA worked closely with the U.S. Department of Transportation (DOT) to ensure close coordination between DOT's and EPA's requirements for transporting hazardous waste. (DOT's definition of "hazardous materials" includes hazardous wastes subject to RCRA, and therefore, DOT's regulations also apply to hazardous wastes.) 40 CFR 262.30 through 262.33 require you to properly package, label, mark and placard your hazardous waste before shipment (see Exhibit 10). Many of the Subpart C requirements reference the DOT regulations found at 49 CFR Parts 172 through 179, as applicable. Thus, generators preparing their waste for transport will need to review the DOT regulations. The "Hazardous Materials Table" at 49 CFR 172.101 is a useful reference for ensuring that hazardous waste shipments are packaged, labeled and placarded in compliance with DOT regulations. Keep in mind that many generators rely on brokers and transporters to prepare their wastes for transport. Using personnel with expertise about the transportation regulations could help to ensure that your shipment complies with all applicable requirements. More information can be found at the DOT's website:

[<https://www.fmcsa.dot.gov/regulations/hazardous-materials>]

Before transporting hazardous waste offsite, a generator must label and mark each package of hazardous waste in accordance with the following words and information:

- HAZARDOUS WASTE – Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.
- Generator's Name and Address.
- Generator's EPA Identification Number.
- Manifest Tracking Number.
- EPA Hazardous Waste Number(s).

Exhibit 10

Pre-Transport Activities

40 CFR 262.30-262.33

- Packaging — 49 CFR Parts 173, 178 and 179
- Labeling — 49 CFR Part 172
- Marking — 49 CFR Part 172
- Placarding — 49 CFR Part 172, Subchapter F

The following label is an example of a label that, when completed accurately, meets the DOT regulations and Pre-Transportation requirements for generators of hazardous waste:

Exhibit 11

**HAZARDOUS
WASTE**

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR INFORMATION:
NAME _____
ADDRESS _____ PHONE _____
CITY _____ STATE _____ ZIP _____
EPA /MANIFEST/
ID NO./ DOCUMENT NO. _____/_____
ACCUMULATION START DATE _____ EPA WASTE NO. _____

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

STYLE WM6

Printed by LABELMASTER, Div. of AMERICAN LABELMARK CO., CHICAGO, IL 60646 (800) 621-5808

5.1 Manifesting Offsite Shipments

40 CFR Part 262, Subpart B and 25 Pa. Code Chapter 262a, Subchapter B

The Uniform Hazardous Waste Manifest (or manifest) is an integral part of the cradle-to-grave system of tracking hazardous waste transport. On June 30, 2017, EPA implemented a national electronic manifest system. Facilities may still opt to use the paper manifest. The manifest must accompany any hazardous waste shipment offsite, regardless of the mode of transport. If you ship hazardous waste offsite, you must complete a manifest (either electronic or paper) with the shipment and ensure that a licensed hazardous waste transporter delivers the manifested shipment to the facility that you have designated on your manifest to receive the waste.

Instructions for completing the Uniform Hazardous Waste Manifest (either electronic or paper) may be obtained through the EPA website [<https://www.epa.gov/e-manifest>] and are included in the Appendix to 40 CFR Part 262. [Note: verify that you are utilizing the most current version of the Uniform Hazardous Waste Manifest.]

Pennsylvania does not require any additional wastes other than RCRA hazardous waste to be shipped using a uniform hazardous waste manifest. In addition, the generator of the hazardous waste does not have to submit a generator copy to the department.

The following are the basic manifesting activities for a hazardous waste shipment:

- As a generator, you must complete the “Generator” portion of the manifest. Carefully follow the instructions when filling it out. For further information on completing a manifest, visit: [<https://www.epa.gov/e-manifest/how-submit-hazardous-waste-manifest>]. (See Exhibit 11 for some best practices in preparing a manifest.) Keep in mind that completing the manifest takes a degree of knowledge and training. Many generators rely on brokers or their designated facility to prepare the manifest for them. For example, some designated facilities pre-print their generator customers’ information on the manifest for them. When the transporter arrives to pick up your waste, they will give you the pre-printed form for you to sign and date. The transporter may not accept your hazardous waste shipment unless it is accompanied by a properly prepared and signed manifest. Exhibit 12 identifies requirements for using continuation sheets. Exhibit 13 describes the special manifest provisions for tolling agreements.
- When the transporter picks up your waste, the transporter must manually or electronically sign and date the manifest and give you a signed copy before leaving. You must keep the signed copy in your files for at least three years, or until you receive a signed copy mailed from the designated facility. The remaining copies of the manifest should accompany the shipment. Note that if more than one transporter company will be used, you must supply additional copies of the manifest for each of the transporters.
- Upon delivery of the waste to the designated facility or another transporter (i.e., co-signee), the delivering transporter must obtain the signature and date from the co-signee to document the delivery. The transporter must keep one copy of the signed manifest and give the co-signee the original and at least one copy of the manifest. Each transporter must retain a copy of the manifest for three years.
- Before the designated facility accepts the shipment, it will ensure that the shipment matches the manifest’s description. If the facility finds a discrepancy, a representative may call you to resolve it. You should cooperate with the facility in this matter, since you are ultimately responsible for ensuring that your manifest is accurate and complete. If the designated facility finds significant discrepancies and cannot resolve them, it must submit a report to DEP within 15 days of receiving the shipment describing the discrepancies and attempts to resolve them.
- Within 30 days of delivery, the designated facility must mail you one copy of the signed manifest to complete the paperwork chain. The facility also must retain a copy for at least three years.
- You must keep the signed copy, mailed from the designated facility, for at least three years from the date your shipment was accepted by the initial transporter.
- LQGs who do not receive the signed manifest from the designated facility within 35 days of shipment must contact the transporter and/or designated facility to investigate the status of the shipment. If the LQG does not receive a signed copy of the manifest from the designated facility within 45 days of shipment, the LQG must submit an exception report to DEP, as provided at 40 CFR 262.42(a). SQGs who do not receive the signed manifest within 60 days of shipment must submit a legible copy of the manifest to DEP, with some indication that the generator has not received confirmation of delivery, as provided at 40 CFR 262.42(b).
- Designated facilities must submit a signed copy of the manifest to the generator.

- On September 1, 2018, a new 5-copy uniform manifest form replaced the former 6-copy form. New manifest forms are sold by U.S. EPA approved registered printers listed in the Manifest Registry. U.S. EPA will accept Page 1 copies of the obsolete 6-copy forms for processing, however it is recommended that users transition to the 5-copy form as quickly as possible.
- For exported hazardous waste, the DEP wishes to receive a signed manifest copy from facilities located outside of the United States which receive hazardous waste from Pennsylvania generators. These copies should be mailed to the address listed below:

PA DEP
Manifest Section
P O Box 8550
Harrisburg, PA 17105-8550

Exhibit 12

Use of Continuation Sheets

- You must use additional manifest forms, not continuation sheets, if you are shipping more than four waste streams, except for lab packs (i.e., small quantities of different wastes from a laboratory).
- Continuation sheets should be used for more than two transporter companies; or for a lab pack that has more than four different waste streams; or if additional space is required for the U.S. DOT descriptions and related information in Item 9 of the initial manifest.

Exhibit 13

Special Provisions for Tolling Agreements

40 CFR 262.20(e)

A manifest does not need to accompany hazardous wastes from a SQG if the waste is reclaimed under a contractual agreement, so long as:

- The type of waste and frequency of shipments are specified in the agreement;
- The vehicle used to transport the waste to the recycling facility and back to the SQG is owned by the reclaimer; and
- The SQG keeps a copy of the reclamation agreement for at least three years after termination or expiration of the agreement.

5.2 Complying with the Land Disposal Restrictions

40 CFR Part 268

If you intend to dispose of your waste on land (e.g., in a landfill), you must determine if the waste is subject to the treatment standards under the Land Disposal Restrictions (LDR) program of 40 CFR Part 268. The LDR program requires that hazardous wastes meet specific hazardous constituent levels or that the wastes be treated using a specified treatment technology prior to being disposed on the land. You can either test the waste or use your knowledge to determine if your waste meets the applicable treatment standards. As the generator, it is your responsibility to ensure that your restricted waste meets the LDR treatment standards before it is land-disposed. In addition, you will have to sign the LDR certification form attesting that the waste meets LDR requirements.

In addition, you also must comply with LDR requirements for tracking and keeping records of the waste. Refer to 40 CFR Part 268 to find all the LDR procedures and treatment standards that apply to your waste. These requirements apply to SQGs and LQGs per 40 CFR 262.16(b)(7) and 262.17(a)(9), respectively. Each of these sections cross-references 40 CFR Part 268.

Exhibit 14 summarizes the basic LDR requirements that apply to generators.

Exhibit 14

Generator Procedures under the LDR Program (40 CFR Part 268)

- Determine if your waste meets the LDR treatment standards by testing or using generator knowledge.
- If the waste does not meet the standards, treat your waste to specified concentration levels or by the specified technology.
- If you treat your waste onsite, develop and follow a written waste analysis plan.
- Transmit notices and certifications with the initial shipment, as specified.
- Keep specified records in your files.

5.3 Recordkeeping and Reporting of your Hazardous Waste Activities

40 CFR Part 262, Subpart D and 25 Pa. Code Chapter 262a, Subchapter D

As a generator, you are required to keep records of your hazardous waste characterization (e.g., testing) and shipping activities onsite. These records will help you demonstrate (and help us determine) whether you are complying with the regulations when we conduct an onsite inspection. Because some of the records pertain to the types and quantities of hazardous wastes generated, these records also may be useful in carrying out other RCRA activities, such as biennial reporting. The following paragraphs describe recordkeeping and reporting requirements.

5.3.1 Keeping Records of Hazardous Waste Activities

40 CFR 262.40 and 262.44 require LQGs and SQGs, respectively, to keep copies of the following information on site for at least three years:

- Each signed manifest that you provide to the transporter when the transporter picks up your hazardous waste shipment. You must keep this copy in your files for at least three years from the date of shipment, or until you get a signed copy from the designated facility.
- Each signed manifest from the designated facility. You must keep the copy in your files for at least three years from the date the waste was transported from your site.
- Each exception report submitted under 40 CFR 262.42(a) or (b) for at least three years from the due date of the report.
- Test results, waste analyses or other determinations made under 40 CFR 262.11 for at least three years from the date the waste was last sent to onsite or off-site treatment, storage or disposal.

In addition, each LQG must keep a copy of each biennial report for at least three years from the due date of the report.

Generators can use e-Manifest to store and retrieve copies of their manifests. The generator's initial paper copy may be discarded and replaced by the final manifest copy when returned to the generator by the receiving facility. The image file of the final manifest will meet their recordkeeping requirements.

5.3.2 Reporting the Hazardous Waste Activities

Exhibit 15 summarizes the primary requirements for generators to report information to DEP under 40 CFR Part 262 and 25 Pa. Code Chapter 262a. Notifying DEP of regulated activities and exception reporting are discussed in previous sections of this chapter. In the following paragraphs, we describe the requirements for generators to report their hazardous waste activities biennially.

Under 40 CFR 262.41, each LQG in the Commonwealth must submit a biennial report to DEP by March 1 of each even-numbered year. The biennial report may be submitted by hard copy paper report, through online reporting or by electronic data submission. To obtain the correct forms or additional information regarding biennial reports, contact DEP at (717) 783-9258 or visit DEP's website at <http://dep.pa.gov/>, keyword: Hazardous Waste.

A small quantity generator must re-notify EPA starting in 2021 and every four years thereafter using EPA Form 8700-12. This re-notification must be submitted by September 1st of each year in which re-notifications are required.

A large quantity generator must re-notify EPA by March 1 of each even-numbered year thereafter using EPA Form 8700-12. A large quantity generator may submit this re-notification as part of its Biennial Report required under § 262.41.

5.4 Preparing and Following a Source Reduction Strategy

25 Pa. Code Chapter 262a, Subchapter I

Waste reduction is an important element of DEP's hazardous waste program. DEP has established special requirements for waste reduction that go beyond the scope of the federal program. As a generator, you have many incentives for reducing the amount of hazardous waste you generate. For example, waste reduction will reduce your hazardous waste management costs, protect employee health and the environment and reduce the possibility of future liability due to mismanagement of the waste.

If you generate more than 1,000 kilograms of hazardous waste in any month of the year, you must prepare a source reduction strategy. For each type of waste that you generate, you must describe the source reduction activities that you conducted in the five years prior to the date the strategy is required and must submit a statement of whether you established a source reduction strategy program. Your program must identify the methods and procedures you will implement to reduce the weight or toxicity of your wastes and quantify the projected waste reduction (in weight or toxicity) that you want to achieve using these methods and procedures. (See Exhibit 16 for some waste reduction ideas.) Your program also must specify when each method or procedure will be implemented. However, if you have not yet developed a source reduction strategy, you must develop a strategy that includes the elements specified in 25 Pa. Code 262a.100(b)(3) (see Exhibit 17).

In complying with the source reduction requirements, you may reference existing documents that you have already prepared to meet other waste reduction requirements. In addition, you may want to contact DEP or EPA for additional information (see Appendix IV).

Exhibit 15

Summary of Generator Reporting Requirements

- Notification of regulated activities (25 Pa. Code 262a.18 and 40 CFR 262.18)
- Biennial reporting (40 CFR 262.41)
- Exception reporting (40 CFR 262.42)

As the generator of your waste, you are responsible for signing the strategy, keeping it on site and making it available to DEP during an inspection or whenever we request it. You also must update your strategy when there is a significant change in a type of waste generated or in the manufacturing process, as well as every five years, except as otherwise specified.

Exhibit 16

Ideas for Waste Reduction Strategy

- Substituting raw materials.
- Modifying or redesigning end products.
- Reformulating or redesigning production processes.
- Changing material usage, handling or storage practices.
- Using closed-loop reclamation, reuse or recycling.
- Using onsite or offsite recycling technologies.

Exhibit 17

Contents of Source Reduction Strategy

(25 Pa. Code 262a.100(b)(3))

If you generate more than 1,000 kilograms in any given month of the year and have not yet developed a strategy, you must develop one that includes:

- A waste stream characterization;
- A description of potential source reduction options;
- A description of how the options were evaluated; and
- An explanation of why each option was not selected.

5.5 Shipping Hazardous Waste Internationally

40 CFR Part 262, Subpart H

If you import or export hazardous waste, you must comply with the requirements of 40 CFR Part 262, Subparts H, as applicable:

- Subpart E of 40 CFR Part 262 establishes procedures for exporting hazardous waste from the United States. Exporters are required to notify EPA of their intent to export waste 60 days before export, receive an EPA Acknowledgement of Consent and follow the tracking requirements (e.g., manifesting) for their shipments, as specified. They also must submit an annual report to EPA of their export activities and keep records on site.
- Subpart F of 40 CFR Part 262 establishes procedures for importing hazardous waste into the United States. Importers must follow the generator standards including the manifest requirements, as specified.

Note, however, that any person who imports or exports hazardous waste to or from a designated member country of the Organization for Economic Cooperation and Development (OECD) for purposes of recovery is subject to Subpart H of 40 CFR Part 262. Subpart H establishes requirements for international shipments of hazardous waste destined for recovery operations in OECD countries. The United States is a designated member country of the OECD. See 40 CFR 262.58(a) for a list of other designated OECD member countries.

Glossary

Emergency Coordinator — An employee onsite or on call that has been designated to conduct emergency response activities and to comply with preparedness and prevention requirements.

Episodic Event — an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.

Exception Report — A notification from a generator to DEP indicating that the generator has not received a signed copy of the manifest from the facility designated to receive the waste shipment. LQGs must submit an exception report to DEP within 45 days, and SQGs within 60 days of shipping the waste off-site.

Generator — Any person, by site, whose act or process produces hazardous waste identified or listed in 40 CFR Part 261 or whose act first causes a hazardous waste to become subject to regulation.

Hazardous and Solid Waste Amendments (HSWA) of 1984 — Federal statutory amendment to RCRA that, among other things, requires EPA to evaluate all listed and characteristic hazardous wastes according to a strict schedule to determine which wastes should be restricted from land disposal and to promulgate treatment standards for restricted wastes.

Hazardous Waste Code — The number assigned by EPA to each hazardous waste listed in 40 CFR Part 261, Subpart D, and to each characteristic waste identified in 40 CFR Part 261, Subpart C.

Hazardous Waste Permit — An authorization via a permit from DEP that allows a facility to treat, store, and/or dispose of hazardous wastes. The permit includes general facility standards (e.g., administrative requirements) and technical standards for each type of waste management unit that is being permitted (e.g., standards for design, construction, operation and closure).

Interim Status — A provision that allows a facility to operate without a hazardous waste permit provided that 1) the facility was in existence on Nov. 19, 1980, or 2) the facility is in existence on the effective date of a new statutory provision or regulation that renders the facility subject to the requirements for a permit. In both cases, the facility must comply with the permitting requirements of 25 Pa. Code Chapter 270a, as applicable, as well as the interim-status requirements of 25 Pa. Code Chapter 265a. The intent of interim status is to allow a facility to continue to operate for a short time period pending approval of its permit application.

Lab Pack — A lab pack is an overpacked container, usually a steel or fiber drum, containing small quantities of hazardous waste.

Land Disposal — The placement in or on the land, except in a corrective action unit, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground cave or mine.

Land Disposal Restrictions (LDRs) — Provisions of HSWA that prohibit the land disposal of hazardous wastes into or on the land unless EPA finds that such land disposal will not endanger human health or the environment. Under HSWA, Congress called for regulations that specify concentrations or methods of treatment that would substantially decrease the likelihood that contaminants in waste would leach from disposal units. EPA responded to these requirements by establishing waste-specific treatment standards that must be met before land disposal.

Resource Conservation and Recovery Act — The Federal Solid Waste Disposal Act, as amended by the 1976 Resource Conservation and Recovery Act (RCRA). Subtitle C of RCRA directs EPA to develop a national program to regulate hazardous waste generation, storage, transportation, treatment and disposal. RCRA has been amended several times, most significantly on Nov. 8, 1984. The 1984 amendments, called HSWA, significantly expanded the scope and requirements of RCRA.

Source Reduction – The reduction or elimination of the quantity or toxicity of hazardous waste generated. Source reduction may be achieved through changes within the production process, including process modifications, feedstock substitutions, improvements in feedstock purity, shipping and packing modifications, housekeeping and management practices, increases in efficiency of machinery and recycling within a process. The term does not include dewatering, compaction, reclamation, treatment, or the use or reuse of waste.

Appendix I: Typical Wastes Generated by Large and Small Quantity Generators

Business Type	Generation Method	Types of Waste	Waste Codes
Dry Cleaning and Laundry Facilities	Commercial dry-cleaning processes	Still residues from solvent distillation, spent filter cartridges and cooked powder residue	D001, D039, F002
Furniture/Wood Manufacturing and Refinishing	Wood cleaning and wax removal, refinishing/stripping, staining, painting, finishing, brush cleaning and spray brush cleaning	Ignitable wastes, toxic wastes, solvent wastes and paint wastes	D001, F001-F005
Construction	Paint preparation and painting, carpentry and floor work, other specialty contracting activities, heavy construction, wrecking and demolition, vehicle and equipment maintenance for construction activity	Ignitable wastes, toxic wastes, solvent wastes, paint wastes, used oil and acids/bases	D001, D002, F001-F005
Laboratories	Diagnostic and other laboratory testing	Spent solvents, unused reagents, reaction products, testing samples and contaminated material	D001-D003, F001-F005, U211
Vehicle Maintenance	Degreasing, rust removal, paint preparation, spray booth, spray guns, brush cleaning, paint removal, tank cleanout and installing lead acid batteries	Acid/bases, solvents, ignitable wastes, toxic wastes, paint wastes and batteries	D001, D002, D006, D008, F001-F005
Printing and Allied Industries	Plate preparation, stencil preparation for screen printing, photo processing, printing and cleanup	Acid/bases, heavy metal wastes, solvents, toxic wastes and ink	D002, D006, D008, F001-F005
Equipment Repair	Degreasing, equipment cleaning, rust removal, paint preparation, painting, paint removal, spray booth, spray guns and brush cleaning	Acid/bases, toxic wastes, ignitable wastes, paint wastes and solvents	D001, D002, D006, D008, F001-F005
Pesticide End Users/ Application Services	Pesticide application and cleanup	Used/unused pesticides, solvent wastes, ignitable wastes, contaminated soil (from spills), contaminated rinsewater and empty containers	D001, F001-F005, U129, U136, P094, P123
Educational and Vocational Shops	Automobile engine and body repair, metal working, graphic arts – plate preparation and wood-working	Ignitable wastes, solvent wastes, acids/bases and paint wastes	D001, D002, F001-F005

Appendix II: Requirements That Apply to Very Small Quantity Generators

You are considered a VSQG in a calendar month if you generate no more than 100 kilograms (220 pounds) of hazardous waste in that month. You are subject to the requirements of 40 CFR 262.14 and 25 Pa. Code 262a.14 for that waste and, except as otherwise specified in section 262.14, you are not subject to 25 Pa. Code Chapters 262a through 266a, 268a and 270a (or 40 CFR Parts 262 through 266, 268, and 270), or the notification requirements of Section 3010 of RCRA. To manage your waste as a VSQG, 40 CFR 262.14 specifies that you must:

- Determine if your waste is hazardous, as provided in 40 CFR 262.11.
- Generate in a calendar month no more than:
 - one kilogram of acute hazardous waste (See 40 CFR 261.31, 261.32, and 261.33 for a list of acute hazardous wastes)
 - 100 kilograms of any residue or contaminated soil, waste or other debris resulting from the clean-up of a spill, onto the land or water, of any acute hazardous waste.
- Accumulate onsite at any time no more than:
 - 1,000 kilograms of hazardous waste (non-acute)
 - one kilogram of acute hazardous waste
 - 100 kilograms of any residue or contaminated soil, waste or other debris resulting from the clean-up of a spill, onto the land or water, of any acute hazardous waste.

(Note: If you generate or accumulate hazardous waste in quantities greater than the levels specified above, you must manage all of the waste according to the requirements specified at 40 CFR 262.14, as appropriate.)

In addition, you may either treat or dispose of your hazardous waste in an onsite facility or ensure delivery to an off-site TSD facility that is either:

- Permitted under 25 Pa. Code Chapter 270a and 40 CFR Part 270 or in interim status under 25 Pa. Code Chapters 270a and 265a and 40 CFR Parts 270 and 265;
- Authorized to manage hazardous waste by a state with an approved RCRA program;
- Permitted, licensed or registered by a state (other than Pennsylvania) to manage municipal solid waste or non-municipal non-hazardous waste, as long as the facility is subject to specified regulations. Note that you may not dispose of your hazardous waste in a municipal or residual waste landfill in the Commonwealth;
- A reclamation facility; or
- For universal waste managed under 40 CFR Part 273 and 25 Pa. Code Chapter 266b, a universal waste handler or destination facility.

Appendix III: Checklist of Generator Requirements

This checklist can be used as a compliance tool for hazardous waste generators. The following table can be utilized to track common references to regulations that may be applicable to their operations. It is not comprehensive of all hazardous waste regulations that may be applicable to a generator, but will provide a better understanding of generator requirements.

Regulatory Citation(s)*	General Requirements	Yes	No	N/A	Comments
40 CFR 262.11(a)(c)(d)(2)	Have you performed a hazardous waste determination on all your waste streams?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.11(f)	Do you keep records of your waste determinations for 3 years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25 Pa. Code 262a.18 and 40 CFR 262.18	Have you obtained an EPA identification number?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25 Pa. Code 262a.18	Have you submitted a subsequent notification, if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b) - SQGs 40 CFR 262.17(a) - LQGs	Are you accumulating your hazardous waste onsite for 90 days or less (for LQGs) or 180.270 days or less (for SQGs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.15	Are you following the special requirements for wastes that are being accumulated at or near the point of generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR Part 265, Subpart (C)	Have you equipped your site with emergency equipment (e.g., fire extinguisher) and ensured that the equipment works?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.264 (LQGs) and 262.16 (SQGs)	Have you designated an emergency coordinator?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR Part 265, Subpart D	For LQGs only: Have you prepared a contingency plan and do you keep it up-to-date and at your site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Regulatory Citation(s)*	Containers	Yes	No	N/A	Comments
40 CFR 262.16	For SQGs only: Have you posted the required emergency information next to your telephone?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 265.16	Do you ensure your employees are knowledgeable about their job functions, hazardous wastes being handled, health hazards and emergency procedures at your site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.30-33	Do you ensure your waste is properly packaged, labeled, marked and placarded before shipment offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.18 and 25 Pa. Code 262a.18(2)	Do you ship your waste using only authorized transporters?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR Part 262, Subpart B	Do you use the proper manifest?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.20	Have you read the instructions on the back of the manifest and ensured it is filled out correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.40(a)	Do you keep copies of all your manifests for at least three years from date of shipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.41 and 40 CFR 262.40(b)	For LQGs only: Do you submit a biennial report to DEP and keep a copy onsite for at least three years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Regulatory Citation(s)*	Containers	Yes	No	N/A	Comments
40 CFR 262.42	Do you submit an exception report (LQGs) or a marked copy of the manifest (SQGs) to DEP if you do not get a signed manifest back from the designated facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25 Pa. Code 262a.100	For LQGs only: Do you follow a source reduction strategy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25 Pa. Code 262a (E) and (H) and 40 CFR Part 262 subpart (H)	Do you follow the special requirements for international shipments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(6)(i)(C) - SQGs 40 CFR 262.17(a)(5)(i)(C) - LQGs	Accumulation begin date clearly marked and visible on each container	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(6)(i)(A) - SQGs 40 CFR 262.17(a)(5)(i)(A) - LQGs	"HAZARDOUS WASTE" clearly labeled on each container	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR Subpart C Sections 262.30 to 262.33 - SQGs & LQGs	Pre-transportation requirements for packing, labeling, marking, and placarding are followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(2)(i) - SQGs 40 CFR 262.17(a)(1)(ii) - LQGs	Containers of hazardous waste in good and leak free condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(2)(ii) - SQGs 40 CFR 262.17(a)(1)(iii) - LQGs	Containers are compatible with the stored hazardous waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(2)(iii)(A) - SQGs 40 CFR 262.17(a)(1)(iv)(A) - LQGs	Containers are closed, except during addition or removal of waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Regulatory Citation(s)*	Tank Systems	Yes	No	N/A	Comments
40 CFR 262.16(b)(2)(iii)(B) – SQGs 40 CFR 262.17(a)(1)(iv)(B) - LQGs	Containers are handled carefully in order to prevent leaks and/or rupture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25 Pa. Code 265a.173	Containers are configured and spaced to ensure safe management and access for inspection purposes and emergency equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(2)(iv) - SQGs 40 CFR 262.17(a)(1)(v) - LQGs	Documented weekly inspections of container storage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 264.175	Container containment areas and collection systems installed and maintained with sufficient capacity and permeability to contain releases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.17(a)(1)(vi) - LQGs only	Special requirements for ignitable and reactive wastes are followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(2)(v) - SQGs 40 CFR 262.17(a)(1)(vii) - LQGs	Special requirements for incompatible wastes are followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.17(a)(1)(i) - LQGs only	Air emission standards under subparts AA, BB, and CC of 40 CFR 265 are followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(6)(ii) - SQGs 40 CFR 262.17(a)(5)(ii) - LQGs	Tanks are labeled with words "HAZARDOUS WASTE", indication of hazards of tank contents, and accumulation start date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Regulatory Citation(s)*	Tank Systems	Yes	No	N/A	Comments
40 CFR 262.16(b)(3)(ii)(B) - SQGs 40 CFR 262.17(a)(2)/265.194 - LQGs	Hazardous wastes or treatment reagents are placed in tank(s) that could cause the tanks to fail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(3)(iv) - SQGs 40 CFR 262.17(a)(2)/265.193 - LQGs	Appropriate controls and practices are in place to prevent spills, leaks and overflows from the tank or secondary containment systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(3)(iii) - SQGs 40 CFR 262.17(a)(2)/265.195 - LQGs	Tanks in operation are inspected at least once each operating day and at other times, as specified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(3)(iii) - SQGs 40 CFR 262.17(a)(2)/265.196 - LQGs	Releases from tanks are promptly responded to, and remediation of any deterioration of the tank system is remedied (LQGs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.16(b)(3)(ii)(A) - SQGs 40 CFR 262.17(a)(2)/265.198 - LQG	The requirements for accumulation of ignitable, reactive, or incompatible wastes in tanks are followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25 Pa. Code 265a.191 and 40 CFR 262.17(a)(2)/265.191 - LQGs	The integrity of tanks that do not have secondary containment have been assessed with the written assessment on file	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40 CFR 262.17(a)(2)/265.192 - LQGs	New tanks have been designed and installed in accordance with applicable regulations and a written copy of a PE's written certification is on file	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25 Pa. Code 265a.193 and 40 CFR 262.17(a)(2)/265.193 - LQGs	Secondary containment is installed, as required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

*DEP's regulations at 25 Pa. Code Chapter 262a adopt by reference most of the federal regulations at 40 CFR 262. In certain cases, DEP made substantive amendments to the incorporated federal regulations. In these cases, this checklist cites both DEP's regulations in 25 Pa. Code and the corresponding 40 CFR regulations. For federal requirements incorporated by reference without modification, this checklist uses a 40 CFR citation.

Appendix IV: Sources of Information for Generators

Resource Directory

Pennsylvania Department of Environmental Protection

Contact Information

The Pennsylvania Department of Environmental Protection (DEP) is in charge of administering Pennsylvania's environmental laws related to air and water quality, solid and hazardous waste, surface mining, drinking water, radiation and regulating dams, water courses and wetlands. DEP operates six regional offices. The Deputy Secretary for Field Operations oversees the daily implementation of Pennsylvania's environmental protection programs. The six regional offices issue permits and conduct inspections at various facilities and locations across the Commonwealth. In addition, the six regional offices oversee emergency response activities.

DEP Emergency Response Hotline: 800-541-2050

DEP General Information: 717-783-2300

Division of Hazardous Waste Management

Bureau of Waste Management

14th Floor Rachel Carson State Office Building

PO Box 69170

Harrisburg, PA 17106-9170

717-787-6239

Southeast Regional Office

2 East Main Street

Norristown, PA 19401

General: 484-250-5900

Waste Management Program: 484-250-5960

Northeast Regional Office

2 Public Square

Wilkes Barre, PA 18701-1915

General: 570-826-2511

Waste Management Program: 570-826-5425

Southcentral Regional Office

909 Elmerton Avenue

Harrisburg, PA 17110-8200

General: 717-705-4700

Waste Management Program: 717-705-4706

Northcentral Regional Office

208 West 3rd Street, Suite 101

Williamsport, PA 17701-6448

General: 570-327-3636

Waste Management Program: 570-327-3740

Southwest Regional Office

400 Waterfront Drive
Pittsburgh, PA 15222-1745
General: 412-442-4000
Waste Management Program: 412-442-4125

Northwest Regional Office

230 Chestnut Street
Meadville, PA 16335-3481
General: 814-332-6945
Waste Management Program: 814-332-6848

Use these helpful websites and contacts to learn more about Waste Source Reduction and Pollution Prevention:

- DEP's Pollution Prevention and Energy Assistance Office, 717-783-8411, or online at www.dep.pa.gov , keyword: pollution prevention.
- Pennsylvania Small Business Ombudsman Office, 717-783-0909, or online at www.dep.pa.gov , keyword: small business.
- The Pennsylvania Technical Assistance Program (PennTAP), 814-865-0427, or online at www.penntap.psu.edu .

Electronic Resources

DEP website: <http://www.dep.pa.gov>

EPA website: <http://www.epa.gov>

RCRA Online website: <http://rcrapublic.epa.gov/rcraonline>

Additional Ways to Obtain the Regulations

You can obtain copies of the Pennsylvania regulations cited in this document in one of the following ways:

- The Pennsylvania Code is available online by visiting <http://www.pacode.com> . You can search the environmental regulations by keyword or citation by selecting "Search" on the left-hand side of your screen, then entering appropriate keywords or the citation, selecting "Title 25 Environmental Protection," and clicking "Search." You can browse through the Pennsylvania Code and locate specific citations by clicking on "Browse" on the left-hand side of your screen, selecting "25 Environmental Protection," clicking "Select" and then clicking on links for the appropriate chapters and sections.
- Paper copies of the Pennsylvania Code are available to the general public by writing Fry Communications, Attn: *Pennsylvania Code*, 800 W. Church Road, Mechanicsburg, Pennsylvania 17055-3198, or by calling 717-766-0211 ext. 2340, 800-334-1429 ext. 2340 (toll free, out-of-State) or 800-524-3232 ext. 2340 (toll free, in-State).

You can obtain copies of the federal regulations cited in this document in several ways, including the following:

- The Electronic Code of Federal Regulations (e-CFR) can be accessed at the following link: <https://ecfr.gov>. Browse Title 40 – Protection of the Environment to locate the federal environmental regulations. Paper, microfiche and electronic copies can be purchased from the U.S. Government Printing Office (GPO). You may purchase books, periodicals and electronic information products from the Documents Sales Service by mail, phone or fax, or by visiting the online United States Government Bookstore at <http://bookstore.gpo.gov>. The GPO Order Desk is open from 8:00 a.m. to 5:30 p.m. eastern time, Monday through Friday, at 1-866-512-1800 or fax 1-202-512-2104.

- The full text of Title 40 CFR is retrievable by regulatory section in Adobe Portable Document Format (PDF) or text versions on the World Wide Web. Begin at <https://www.gpo.gov/fdsys/pkg/CFR-2003-title40-vol1/content-detail.html>, then scroll down to where you can select the most recent version of Title 40-Protection of Environment. You can retrieve specific regulatory sections by selecting the appropriate regulatory part numbers.

Appendix V: Summary of Requirements Applicable to the Onsite Accumulation of Hazardous Waste in Containers and Tanks

Summary of Generator Requirements for Accumulating Hazardous Waste in Containers

If you accumulate your hazardous waste in containers, you must follow the standards of 40 CFR 262.16(b)(2) and 262.17(a)(1), as well as Subchapter I of 25 Pa. Code Chapter 265a.

- Ensure that the date upon which each period of accumulation begins is clearly marked and visible for inspection on each container.
- Ensure that each container is labeled or marked with the words "Hazardous Waste" and an indication of the hazards of the contents.
- Maintain the containers in good condition. If a container is not in good condition or begins to leak, put the waste in another container or contain it in some other way.
- Use containers that are made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.
- Keep containers closed during accumulation of waste, except when adding or removing waste. Do not open, handle or store containers in a way that might rupture them, cause them to leak or otherwise fail.
- Ensure that the height, width and depth of a group of containers provide a configuration and aisle spacing that insures safe management and access for purposes of inspection, containment and remedial action with emergency vehicles.
- Inspect areas where containers are stored, at least weekly, looking for leaks and for deterioration caused by corrosion or other factors.
- Clean up releases and precipitation and remediate any deterioration detected.
- Comply with the containment and collection system requirements. Keep in mind that a containment system for containers need not be elaborate or complex, as long as it meets the specified design requirements. For example, you can buy pre-fabricated storage pads that provide an adequate base and efficient drainage and spill capacity for 55-gallon drums. In addition, overpacking a 30-gallon drum inside a 55-gallon drum that is filled with absorbent (e.g., foam packaging material) also could meet the design standards for containment. The federal regulations do not include containment and collection system requirements.
- Follow the procedures for incompatible wastes.
- Place containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line, unless the authority having jurisdiction grants a written approval for a closer distance.
- For LQGs only:
 - Comply with applicable air emission standards.
 - Comply with closure requirements found under 40 CFR 262.17(a)(8)

Summary of Generator Requirements for Accumulating Hazardous Waste in Tanks

If you accumulate your hazardous waste in tanks, you must comply with the standards of 40 CFR 262.16(b)(3) and 262.17(a)(2), as well as Subchapter J of 25 Pa. Code Chapter 265a.

- Label or mark your tanks with the words “Hazardous Waste” and accurately identify tank contents.
- Avoid placing hazardous wastes or treatment reagents in a tank system if they could cause the tank, its ancillary equipment or the secondary containment system to rupture, leak, corrode or otherwise fail.
- Use appropriate controls and practices to prevent spills, leaks and overflows from the tank or secondary containment systems (e.g., waste feed cutoff or by-pass system in the event of a leak or overflow).
- Inspect operating tank systems at least once each operating day.
- Inspect tank systems once each operating day, if waste remains in the tank or tank system components.
- Promptly respond to releases and remediate deterioration detected in the tank system.
- Comply with the requirements for ignitable, reactive or incompatible wastes.
- Provide adequate freeboard for uncovered tanks unless containment is provided.
- For LQGs only:
 - For certain historic tank systems that do not have the required secondary containment, keep on file a written assessment attesting to the tank system’s integrity.
 - Design and install new tanks in accordance with 40 CFR 265.192.
 - Provide for containment and detection of releases (e.g., including liners, vaults, double-walled tanks) in accordance with 25 Pa. Code 265a.193. Containment must be:
 - Constructed of or lined with materials that are compatible with the waste and of sufficient strength and thickness;
 - Placed on a foundation or base capable of providing necessary support and stability;
 - Provided with a leak detection system; and
 - Sloped or otherwise designed to drain and remove leaks, spills and precipitation.
 - Comply with applicable air emission standards.
 - Close the tank system in accordance with 40 CFR 265.197.

Appendix VI: Emergency Response Worksheet for Small Quantity Generators

EMERGENCY RESPONSE INFORMATION

EMERGENCY COORDINATOR:

Name: _____

Telephone Number: _____

FIRE DEPARTMENT:

Telephone Number: _____

LOCATION(S) OF:Fire Extinguishers: _____
_____Spill control material: _____

Fire alarm (if present): _____

Fill in and post this information next to your telephone. Make sure all employees are familiar with its contents.

EMERGENCY RESPONSE PROCEDURES

In the event of a fire: Call the fire department or attempt to extinguish the fire using a fire extinguisher.

In the event of a spill: Contain the flow of hazardous waste to the extent possible, and as soon as practicable, clean up the hazardous waste and any contaminated materials or soil.

Company Name: _____

Address: _____

EPA ID Number: _____

In the event of a fire, explosion or other release, which could threaten human health outside the facility, or when you have knowledge that a spill has reached surface water, you must immediately call the National Response Center at its 24-hour toll free number, 800-424-8802. Your report to them must include the following information:

- Your company name
- Your company address
- Your EPA ID number
- Date of accident
- Time of accident
- Type of accident (e.g., spill or fire)
- Quantity and type of hazardous waste involved
- Extent of injuries, if any
- Estimated quantity and disposition of recovered materials, if any

