EPS-61

Hazardous Waste Management

Introduction

Hazardous waste poses a substantial danger, now or in the future, to human, plant, or animal life. Hazardous wastes must be handled, stored, transported, and disposed of using special precautions. Jefferson Lab is responsible for its hazardous wastes from generation (cradle) to final disposal (grave) and beyond (eternity).

This chapter and its appendices summarize the Hazardous Waste Management Program at Jefferson Lab. Use this chapter and its appendices for directions on hazardous waste labeling, accumulation, preparation for off site shipment, and final disposal—that is, from cradle to grave.

All hazardous wastes generated at Jefferson Lab are gathered and disposed of through several Satellite Accumulation Areas (SAAs) and one Central Accumulation Area (CAA). Information on the operation and requirements of these areas are found in the appendices listed below.

- For information on handling hazardous materials that are not wastes, see Chapter **6610** *Chemical Hygiene*.
- For guidance and information on the identification and handling of all types of waste, including radioactive waste, see **EPS-60** *Waste and Recyclable Materials Management*.

Under the Lab's Environmental Management System (EMS), some of the Jefferson Lab environmental aspects that are addressed are:

- regulated waste- hazardous waste
- spills - chemical spills

Appendices
- **EPS 61-T1** *Hazardous Waste Generators & SAAs*
- **EPS 61-T2** *CAA Management and Off Site Disposal*
- **EPS 61-R1** *Know Your Hazardous Waste*
- **EPS 61-R2** *Hazardous Waste Areas Inspection Reports*

Key Terms

Chapter **6710** *Environmental Protection Program* includes descriptions of relevant laws, agencies, standards, and terms applicable to the environmental protection (EP) program. Many of these laws and standards specifically address hazardous waste and are referenced in this chapter.

acutely hazardous waste (AHW) Solid wastes which the EPA has determined to be very dangerous even in amounts smaller than 1 cup or 237 mL. Wastes listed in 40 CFR 261.31 that are followed by the symbol "H", and all of the "P" wastes listed in 40 CFR 261.33 (e) are acutely hazardous and found to be fatal to humans in low doses. Examples include some cyanide and mercury compounds.

Virginia's 9 VAC 20-60 et seq. is the adoption of 40 CFR Part 261 et seq. by reference.

Central Accumulation Area (CAA) A common location where hazardous wastes are accumulated and stored prior to shipment off site. The Jefferson Lab CAA is located in bays 2 and 3 of Building 33, the Chemical Storage Building.

characteristic wastes Hazardous wastes that are either corrosive, ignitable, reactive, or toxic. See description in *EPS 61-R1 Know Your Hazardous Waste*.

disposal The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid or hazardous waste into or on any land or water so that such waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters.

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

generation site The contiguous site at or on which one or more hazardous wastes are generated. An individual generation site may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

Buffered chemical polish (BCP) and Electropolish (EP) solution are two mixtures of acids used to process niobium components.

hazardous material A substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported commercially. Hazardous materials include substances that are hazardous waste as well as substances that are not yet declared wastes. Acetone and oil-based paints are examples.

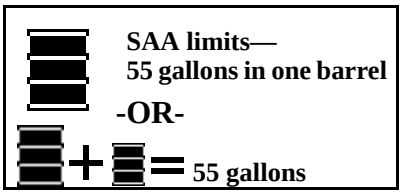
hazardous substance A material, including its mixtures and solutions, as defined under state and federal regulations. It includes all hazardous wastes, hazardous air pollutants, and any material designated in applicable regulations.

hazardous waste coordinator (HWC) The Jefferson Lab employee assigned by the Accelerator Division to manage the on-site handling, central accumulation, movement, and off site shipment of all Jefferson Lab hazardous wastes.

hazardous waste disposal facility A facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which the waste will remain after closure.

large quantity generator (LQG) A generator of more than 1,000 kg of hazardous waste and/or more than 1 kg of acutely hazardous waste in a calendar month.

Satellite Accumulation Area (SAA) A temporary holding area for small quantities of hazardous waste located at or near the generation site. A generator may accumulate as much as 55 gal of hazardous waste or one quart of acutely hazardous waste in containers at an SAA. Each SAA is under the control of the operator of the process generating the waste. The combined capacity of all containers at an SAA cannot exceed 55 gal.



small quantity generator (SQG) A generator of more than 100 kg, but less than 1000 kg of hazardous waste, and no more than 1 kg of acutely hazardous waste, in a calendar month. Jefferson Lab is a SQG.

solvent mixture rule Relates **only** to F001-F005 (Listed) wastes and applies to waste determination in a very interesting way. It considers the concentration (by volume) of the presence of these chemical compounds in a solution **before** use. If, prior to use, the waste material was composed of 10% or more of a single listed chemical or consisted of 10% or more of a mixture of these chemicals, then it is subject to hazardous waste regulation in the "F" Listing. This is a RCRA-based rule. Examples at the Lab include F002 methylene chloride and F003 acetone.

storage facility A facility where hazardous wastes are held for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

Toxic Characteristic Leaching Procedure (TCLP) A formal procedure used to assess the leachability of certain constituents in wastes.

transporter Any person engaged in the off site transportation of hazardous waste either by air, rail, highway, or water.

Treatment, Storage, and Disposal (T/S/D) Three different hazardous waste management activities regulated under RCRA. Jefferson Lab performs only limited storage activities, and is currently exempt from this requirement.

waste, characteristic These "D" type wastes are declared hazardous because they meet at least one of the general properties of ignitability (D001, methanol), corrosivity (D002, nitric acid), reactivity (D003, flash powder), or toxicity (D009, mercury).

waste, hazardous A solid, liquid, or gas no longer suited for its intended purpose, and is not excluded from regulation, that is ignitable, corrosive, toxic, reactive, or specifically listed in 40 CFR 261. Because of quantity, concentration, or characteristics, the substance may cause or contribute to an increased mortality rate or pose a substantial present or future hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed. Refer to Section 1004 (5) of RCRA for more information.

waste, listed hazardous A hazardous waste as listed in RCRA regulations. Hazardous wastes can fall under one or more of the following categories:

Any hazardous waste which is composed of 10% or more of any of the F solvents listed for toxicity (T) before any processing is always hazardous due to EPA listing.

F - wastes from nonspecific sources such as electroplating and metal heat treating operations as well as spent solvents. The "F" Listings, F001-F005 wastes, relate to the solvent mixture rule.

K - wastes from specific sources such as wood preserving chemicals, (not generated on-site).

U - toxic hazardous wastes from specific sources such as methyl ethyl ketone and hydrofluoric acid.

P - acutely hazardous waste from specific sources such as sulfuric acid, in the form of a thallium salt, and beryllium powder.

waste, mixed A radioactive waste that contains a substance which renders the mixture a hazardous waste.

waste, non-hazardous A waste not meeting any of the criteria for hazardous waste, though the waste may still require special handling and disposal.

waste profile A document that identifies the material to be disposed of by characteristics and properties.

waste, regulated A waste is considered regulated if there are specific state or federal laws that govern handling or disposal of that waste. Some are subject to Subtitle C of RCRA Regulations.

waste, solid As applicable to hazardous waste, is almost any discarded material that is not excluded by regulation or variance. These discarded materials include abandoned, recycled, and inherently waste-like materials. Refer to Section 1004 (27) of RCRA or 40 CFR 261.2 for more information.

wastestream The final non-usable output of any process which must be disposed of in some manner. Examples include sewage and used BCP.

Acronyms

HWC	Hazardous Waste Coordinator
HWT	Hazardous Waste Technician
JLEnE	Jefferson Lab Environmental Engineer
RCRA	Resource Conservation and Recovery Act

Descriptions of applicable laws and regulations are provided in *Appendix 6710-R1 Environmental Laws and Regulations*.

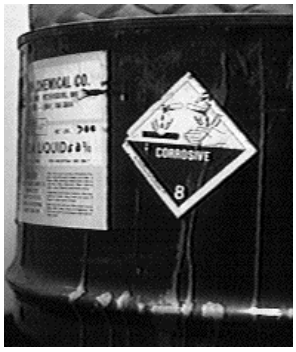
Hazard Avoidance

Improper handling, treatment, or disposal of wastes can create unnecessary hazards.

- Be familiar with the chemicals you use in your job or on research projects—know which ones are non-hazardous, hazardous, or otherwise regulated.
- Know where hazardous wastes are stored in your area.
- Observe and follow warning signs posted at the waste generation and accumulation areas.
- Stay away from hazardous waste accumulation areas (unless trained).
- Notify your supervisor and ESH&Q staff of any
  - open or improperly sealed waste containers
  - leak observed from a hazardous waste container
  - unknown or unlabeled materials
  - material that may be a hazardous waste
- If you have waste and do not know if it is hazardous, contact your supervisor or ESH&Q staff for guidance.
- Be familiar with and practice proper recycling and disposal techniques for the chemicals you use.
- Do not dispose of chemical waste down drains.

Note to Consider!
Hazardous material users likely produce some form of hazardous waste, such as contaminated rags, Spill-x, sand, etc. Are you handling all of your wastes correctly? *If in doubt: check with your division ESH&Q Staff or the Lab Chemical Assistance Team (ext. 7039, ext. 7882, or ext. 7863).*

Jefferson Lab Incidents



Serious incidents involving spillage and pressure build-up of containers of hazardous waste have occurred. Refer to Chapter **6610** *Chemical Hygiene* and *Appendix EPS 61-T1 Hazardous Waste Generators and Satellite Accumulation Areas* for information on proper handling and storage procedures.

Responsibilities

Chapter **6710** *Environmental Protection Program* summarizes staff EP responsibilities. The following detailed guidance will assist staff in fulfilling the Lab's hazardous waste management goals and objectives.

Everyone at Jefferson Lab

Wear PPE according to Lab procedures. See Chapter **6620** *Personal Protective*

When in doubt about proper practices, contact your supervisor, SOTR, or sponsor.

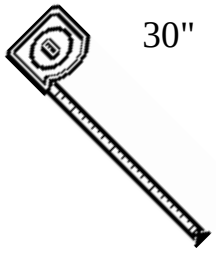
- Use your supervisor, ESH&Q staff, and the HWC (ext. 7039) as resources to provide guidance and assistance on both a formal and informal basis.
- Call attention to any environmentally unsound activities such as improperly stored, labeled, or leaking containers, or other evidence of incorrect hazardous waste management practices you observe. See Chapter **2310** *EH&S Concern Resolution*.

Generators of Hazardous Waste

General

- Reduce the amount of hazardous waste generated by recycling, providing for other on-site use, reducing quantities used, or finding non-hazardous substitutes.
- If discharges of any unusual wastes to the sanitary sewer system are considered, submit all required substance release information to the HWC.
- Perform a Task Hazard Analysis (THA) on any waste generating processes under your responsibility. Identify all hazardous or regulated waste streams. See Chapter **3210** *Hazard Identification and Characterization* for guidance. Provide a copy to your supervisor and to the HWC.
- Identify and characterize your hazardous waste stream(s). Your supervisor will assist upon request.
- Provide the HWC with written notice of any new waste streams from your area, estimated generation rates, and proposed process production schedule for the waste.
- Avoid mixing two different wastes unless you know that mixing them has no adverse effects.

Manage and maintain the SAA



Maintain a clear access path to the SAA—a minimum width of 30"

- Prior to generation, work with the HWT, who will provide a container and guidance on maximum container fill level. Ensure that containers are properly labeled.
- Prepare, with assistance from the HWT, the generation/SAA work site and add all required and appropriate signs and emergency contact lists.
- If you are dealing with liquid materials, keep a fully stocked spill kit readily available. Make sure everyone who may need it knows where it is and how to use it.
- Perform weekly visual inspections, including noting the available capacity at your SAA. Promptly address any concerns. Assist CAA staff during monthly inspections in your area.
- Maintain HRSD-permitted systems to stay within all permit conditions. Have maintenance records and monitoring data available upon request.

- Add fill date to container label when the predetermined fill level is reached.
- Notify the HWC to arrange pick-up the day a container reaches its fill level. The container must be moved to the CAA within 3 calendar days of the container's fill date.
- Assist the HWC, upon request, in performing Quality Assurance on hazardous waste T/S/D facilities used by Jefferson Lab.
- Use *Appendix EPS 61-T1 Hazardous Waste Generators and Satellite Accumulation Areas* and *Appendix EPS 61-T2 Central Accumulation Area Management and Off Site Disposal* as guides.

Supervisors/Line managers/Subcontracting Officer's Technical Representative (SOTR) who oversee generators

- Ensure generators properly identify all waste streams in your area of responsibility and determine if any are hazardous or regulated and determine their program requirements. Notify the HWC who will assist upon request.
- Maintain a list of all job positions involving hazardous waste activities, training requirements for each position, training records, and the people in those positions.
- Provide training for personnel in:
  - proper handling and labeling
  - health effects from overexposure
  - cleanup of small amounts of hazardous waste
  - response to cleanup of larger quantities of hazardous waste
  - response to emergencies
- Ensure that generators post emergency procedures for hazardous waste (or material) operations and spills.
- Inspect waste containers regularly for possible deterioration or malfunctions.
- Inform the HWC, in writing, about program changes to accumulation area locations, waste types, and generation amounts.
- If you have a contractor/vendor producing a hazardous waste on-site, a SAA must be established. Make sure the vendor goes through the Jefferson Lab HWC to register the SAA and to arrange pickup and disposal of the waste. Recyclable materials such as lead pipe or batteries are not considered hazardous waste.

Area Safety Warden

- Inspect accumulation areas periodically to make sure personnel are aware of hazards and that the areas comply with all regulatory requirements.
- Ensure that generators with containers holding more than two compatible materials maintain a record of the type and amount of waste accumulated in that container.
- Monitor the predetermined maximum fill level for containers to ensure fill levels are not exceeded.
- Inform visitors and subcontractors of any special precautions related to hazardous wastes they could be exposed to within your area.

Hazardous Waste Technician (HWT)

- Prior to any generation, provide generator with appropriate container and establish the container maximum fill level that includes buffer space for the particular waste (marked on container).
- Provide generator with SAA sign and container labels and assist with labeling and fill date information. Upon request, assist generators with regular SAA inspections.
- Perform written monthly RCRA-required inspection at all SAAs, using the Monthly RCRA Inspection Report.
- Perform a visual walk through inspection of the CAA daily to assure no overt problems.
- Perform written weekly and monthly RCRA-required inspections, including the waste quantity inventory, of CAA using forms provided in *Appendix EPS 61-T2 Central Accumulation Area Management and Off Site Disposal*.
- Maintain list of all Jefferson Lab staff qualified to relocate hazardous waste containers.
- Provide services to move any hazardous waste container from a SAA to the CAA within 3 calendar days of notification. Provide estimates of weight and annotate this weight on the CAA Hazardous Waste Log.
- Log waste onto the CAA Hazardous Waste Log upon arrival at the CAA.
- Provide services for moving hazardous waste containers within the CAA and onto subcontractor vehicles. Make sure Jefferson Lab's EPA Identification Number is on the DOT shipping label for all hazardous wastes.
- Hand carry the generator's copy of the hazardous waste manifest and LDR form, if required, to the Jefferson Lab Environmental Engineer (JLEnE) immediately after shipment.
- Tabulate and monitor the hazardous waste quantity inventory (using information from the inspection forms) on a monthly basis (or more frequently) to ensure that no more than 6,000 kg (13,200 lb) of hazardous waste is present on-site at any time. Note that seventeen 55 gal drums of hazardous waste could approach this limit, depending on density.
- Monitor the hazardous waste generation rates (using inspection forms) to ensure that no more than 1,000 kg of hazardous waste is generated per month. If the rate exceeds 750 kg, notify the JLEnE to assist in determining necessary action.

Hazardous Waste Coordinator (HWC)

- Provide technical assistance and guidance on all aspects of the hazardous waste program.
- Perform cradle-to-grave hazardous waste management for all Jefferson Lab activities.
- Serve as emergency coordinator or delegate the responsibility to other knowledgeable staff. Develop emergency procedures for lab personnel to follow pertaining to hazardous waste.
- Assist generator's supervisor to provide technical assistance.
- Provide waste stream identification and characterization support to generators as requested. Reference *Appendix EPS 61-R1 Know Your Hazardous Waste*.

- Assist generators with preparing Task Hazard Analysis, as needed.
- Assist training manager in identifying training requirements for all roles including any hazardous material movers.
- Identify all locations where hazardous waste is produced and obtain generation rate information for each hazardous waste stream from generators.
- Manage all hazardous waste material sampling records.
- Ensure performance of weekly inspection at CAA and monthly inspections at the SAAs and CAA. All SAA inspections include on-hand quantity and generation rate information. Distribute all monthly information to JLEnE within 3 days of completing monthly inspections.
- Ensure that the CAA Hazardous Waste Log is kept complete and current.
- Keep files of all program records and documents, except as noted under specific roles.
- Work with Procurement to ensure all subcontractors and vendors have proper regulatory credentials.
- Select and periodically review disposal facilities.
- Schedule hazardous waste pick-ups.
- Provide transporters with all appropriate manifest and land disposal information. Ensure that manifest forms are fully completed prior to off site disposal. Ensure that subcontractor vehicles meet all DOT regulations.
- Provide at least annual hazardous material roundups to gather up unneeded and unmanaged hazardous materials.
- Provide annual report to division safety officers & JLEnE on status and changes in hazardous waste activities.
- Assist JLEnE in filing notifications as required by RCRA.
- Track all hazardous waste minimization planning and actions and report to JLEnE on a semi-annual basis.
- Work with JLEnE to obtain permission to discharge materials to HRSD.

Jefferson Lab Environmental Engineer (JLEnE)

- Work with the HWC to review federal, state, and local regulatory requirements; update training and program requirements as needed.
- Maintain all hazardous waste manifest and land disposal restriction listings and records.
- Review monthly RCRA inspection records for completeness and consistency. Verify that the site inventory does not exceed the 6,000 kg maximum and that the generation rate is less than 1,000 kg per month.
- As required, ensure that appropriate state and EPA notifications are completed properly.
- Contact the disposal facility if the facility receipt copy of the manifest is not received within 30 days after shipment. Notify HWC of any problems. Complete EPA Exception Report within 60 days and notify State Director if facility copy not received within 45 days.

ESH&Q Division Health & Safety Department Head

- Ensure that the CAA and all hazardous wastes passing through it are managed in accordance with this chapter.
- Establish interface requirements between SAAs and the CAA by coordinating with other Division Safety Officers. See Chapter **2230** *EH&S Responsibility for Products*.
- Develop and maintain a charge-back system to allocate waste disposal costs equitably.
- Appoint and supervise the HWC and the HWT.
- Work with JLEnE to ensure that hazardous waste treatment, transport, or disposal facilities used by Jefferson Lab are monitored for compliance with applicable permits and regulations, on at least an 18-month schedule.

Division Safety Officers

- Inform division staff of the lab-wide role of the HWC and CAA.
- Maintain a file of internal hazardous waste activities in your division as provided by the HWC.

Associate Directors

- Allocate resources to ensure that hazardous wastes are handled and disposed of appropriately.
- Support the minimization of hazardous waste streams.

Each ARC Building tenant has their own program for managing hazardous waste. Contact the ARC Building Manager at ext. 7702 if you have any questions.

Qualifications

Hazardous waste training is required under RCRA and OSHA for those employees who work with hazardous waste.

For small quantity generators, RCRA requires:

- Employees working in a hazardous waste area to be trained on the hazards of the job and applicable regulations.
- Assurance that employees are knowledgeable about appropriate response to emergencies.
- Employers list all job positions involving hazardous waste management and maintain a list of persons filling those positions.

Only individuals who have reviewed the relevant task hazard analysis and operating procedures with their supervisor may handle hazardous wastes at Jefferson Lab. See Chapters **3210** *Hazard Identification and Characterization* and **3310** *Standard Operating Procedures and Operational Safety Procedures*.

In addition to meeting standard chemical hygiene training requirements, hazardous waste workers must be trained in methods used to detect the presence or release of a hazardous chemical in the work area, such as monitoring devices, visual appearance, or odor of hazardous chemicals.

Specific Training Requirements

Jefferson Lab Employees and Users must complete SAF 100 ESH&Q Orientation, which includes recognizing a potential chemical hazard and reporting problems.

SAA Generators must complete customary Safety Warden training pertaining to hazardous waste management.

CAA Staff

- Complete the 8 hour First Responder Training and, at a minimum, receive an annual refresher.
- Complete Safety Warden Training and Forklift Safety as applicable.
- Qualify for Self Contained Breathing Apparatus (SCBA) use.

HWC and HWT

- Complete the 40 hour HAZWOPER course and an 8 hour annual refresher. The HWC and the HWT will also complete Manifest/LDR training.
- The HWC shall also take a minimum 8 hour Hazardous Waste Manager's course.

Hazardous Material Movers

Different types of waste handling require different levels of training.

- Waste acid movers shall have completed the 24 hour Hazardous Materials Technician course.
- Movers of other hazardous wastes shall have received customary Safety Warden training pertaining to hazardous waste management.

Subcontractors/Vendors

Subcontractors that generate hazardous waste on-site must:

- ❖ Collect all waste in accumulation areas as established under the direction of the SOTR.
- ❖ When no longer needed, remove all non-waste materials from the job site.

Vendors that transport, store, treat or otherwise dispose of hazardous wastes must:

- ❖ Use the Jefferson Lab EPA Identification Number for each operation performed under the subcontract.
- ❖ Must be duly licensed and permitted in the states in which they operate.
- ❖ Must provide evidence of the form and amount of insurance as required for their particular operations. Insurance must be for not less than one million dollars comprehensive general liability insurance with specific endorsements for pollution liability. The Certificate of Insurance must be provided directly by the broker and must name SURA and DOE as additional insureds.

The HWC, with assistance from line management or the SOTR, shall work with Procurement to ensure that prospective vendors have appropriate credentials prior to a contract award. Prospective vendors shall not be in major, willful violation of regulatory requirements.

Jefferson Lab is responsible for any hazardous waste generated from cradle to grave.

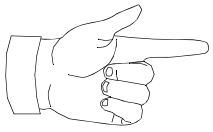
Planning

While planning ahead...

Whenever a new process involving potential hazardous waste generation is being developed or studied, use the various waste management chapters in this manual to determine the applicable requirements. At the design phase, be sure to identify and characterize all potential waste streams; only by doing this first can you plan for proper waste handling and containment. Before generating a waste, take time to determine the dangers and costs associated with handling that waste, and ask if methods exist to produce less waste and/or less hazardous waste.

Upon determining that a process will generate hazardous waste...

Handling hazardous waste is a critical activity, as even small or low-concentration amounts can be dangerous to people and the environment. Procedures for safe handling, containment, and transport of hazardous waste are provided in the two appendices following this chapter. It is important to determine the appropriate handling and accumulation requirements, and prepare staff for these requirements before the new waste is generated. *Appendix EPS 61-T1 Hazardous Waste Generators and Satellite Accumulation Areas* and *Appendix EPS 61-T2 Central Accumulation Area Management and Off Site Disposal* are integral to ensuring a successful hazardous waste management program.



Do not send a waste to the CAA without making prior arrangements with the Hazardous Waste Coordinator at ext. 7039.

Program Summary

RCRA established a program to protect people and the environment from adverse impacts resulting from improper handling and disposal of waste. RCRA also encourages hazardous waste generators to practice waste minimization (WMin) and pollution prevention (P2). The EPA has established requirements governing the management of hazardous wastes and delegated the responsibility for implementation to some states, including the Commonwealth of Virginia. Except as otherwise provided, Virginia has adopted the EPA regulations.

Refer to Chapter **6770** *Waste Minimization and Pollution Prevention* for more information on reducing the generation

Jefferson Lab generates a variety of hazardous wastes, including acids, etchants, and solvents. The hazardous waste staff work with generators to minimize waste generation.

The Jefferson Lab Hazardous Waste Management Program is designed to ensure safe handling, transport, and disposal of hazardous waste. Jefferson Lab complies with all federal and state regulations in its role as a Small Quantity Generator (SQG). An identification number must be used on all hazardous waste transport/manifest documentation to provide traceability information per RCRA.

As a SQG, up to 1000 kilograms (2200 lb) of hazardous waste and up to 1 kg of acutely hazardous waste can be generated per month, with a maximum of 6000 kg (13,200 lb) permissible on-site at any time. Hazardous wastes can accumulate in drums in the CAA for up to 180 days (270 days if waste is being transported to a facility > 200 miles away). This 180 days includes time in transport (by licensed subcontractors) to approved recycling, treatment, storage, or disposal facilities.

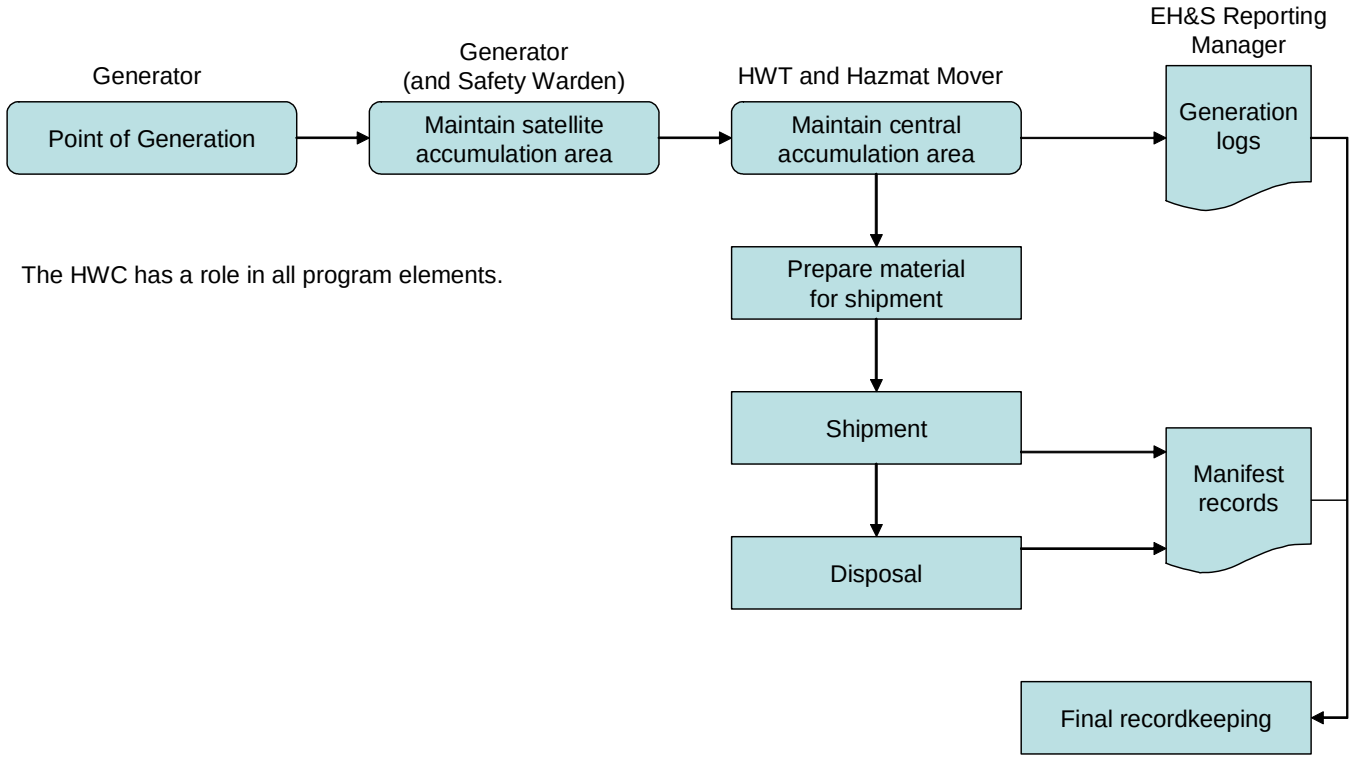
Generated wastes are contained and stored in the designated CAA. Two bays in the Chemical Storage Building (Bldg. 33), located on the south side of the Test Lab, serve this purpose. Under RCRA guidelines, hazardous waste staff ensure that wastes generated are disposed of in the most acceptable manner.

All hazardous wastes and unusable hazardous materials must be processed through the CAA.

Chemical Storage Building (Bldg. 33)

Figure 1 is a chart depicting the primary roles involved in the program. Figure 2 is a diagram showing various time limits involved with the different program elements.

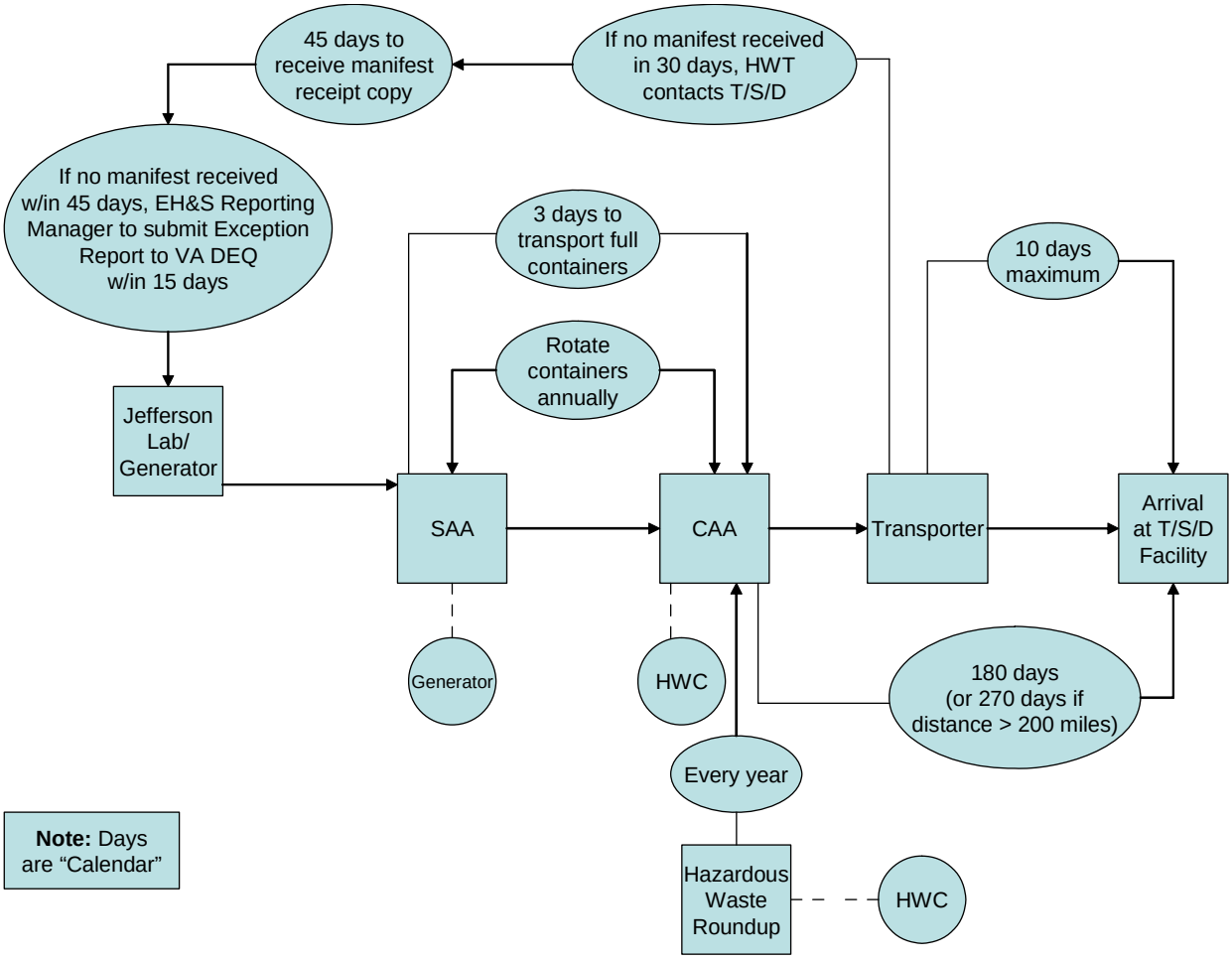
Figure 1: Program Roles and Elements



Emergency Coordinator

The emergency coordinator works to minimize the possibility of fire, explosion, or any unplanned releases of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. At least one designated staff member should be on the premises or on call at all times and able to respond quickly to an emergency.

Figure 2: Hazardous Waste Program Time Limits



Appendix EPS 61-R1 Know Your Hazardous Waste outlines the steps to identify and classify a hazardous waste. Once a hazardous waste is classified, follow the procedure for handling and accumulating these wastes outlined in:

- *Appendix EPS 61-T1 Hazardous Waste Generators and Satellite Accumulation Areas*. This is geared toward the people and process initially generating the hazardous waste—how to safely handle and contain it in a SAA until it can be moved to the CAA. See Figure 1 in this appendix.

- *Appendix EPS 61-T2 Central Accumulation Area Management and Off Site Disposal*. This deals with managing the CAA and the people responsible for getting wastes into the CAA and to the final disposal point.

References

9 VAC 20-60 et seq. Hazardous Waste Management Regulations. Commonwealth of Virginia
The Resource Conservation and Recovery Act of 1976 as amended
29 CFR 1910.120 - OSHA, Hazardous Waste Operations and Emergency Response
29 CFR 1919.1200 - OHSA, Hazard Communications
40 CFR 262 - Standards Applicable to Generators of Hazardous Waste
40 CFR 263 - Standards Applicable to Transporters of Hazardous Waste
40 CFR 265, HM/26F
49 CFR 171-179 - Department of Transportation Regulations

These references can be found at the ESH&Q Division Office in Room 602 of the ARC Building.