

Decoding RCRA: Navigating the Basics of Hazardous Waste

Presented by:

Bill Narotski

Hazardous Waste Program

Division of Environmental Response & Revitalization

March 8, 2022

2022 Safety Congress and Expo Supplemental
Environmental Sessions



Resource Conservation and Recovery Act (RCRA)

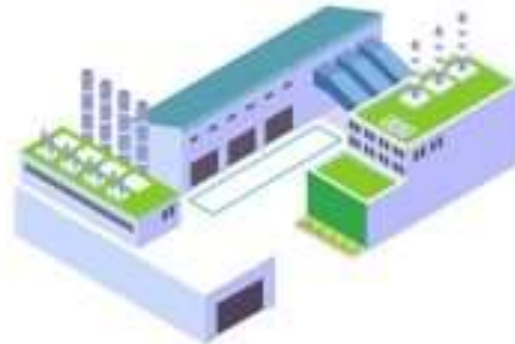
“Cradle-to-Grave” Management



Generator



Transporter



Treatment
Storage
Disposal
Facility

The cornerstone of RCRA

WASTE EVALUATION



What is a waste?

Discarded
Material

- Disposed
- Burned
- Stored or treated (in lieu of discarding)

Recycled
Material

- Applied on ground
- Burned for energy recovery
- Speculatively accumulated

What is not a waste?

Excluded waste

- Found in [OAC rule 3745-51-04](#)

Reused or reclaimed materials

- Applies only to certain materials

Waste Evaluation

Under Ohio's laws, all wastes must be evaluated by the generator.

Generator

- Any person, by site, whose act or process produces or causes a hazardous waste to become subject to the hazardous waste rules.

Hazardous Waste Determination

- Applies to all generators
- Failure to properly evaluate your waste may lead to unsafe conditions or violations from improper management



Hazardous Waste Determination

- Determination must be made at the point of generation
 - Prior to dilution/mixing/alteration
 - New determination if properties have changed

[OAC rule 3745-52-11](#)

Important!



Don't throw any waste into the dumpster unless you have confirmed and demonstrated that it is NOT a hazardous waste.

Hazardous Waste Evaluation

Tools you can use:

- Ohio hazardous waste rules
- Lab analysis of waste
- [Generator knowledge](#)
 - Process inputs
 - Information from vendor/supplier
 - Safety Data Sheet (SDS)

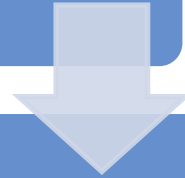
**Need to document your evaluation and keep on file*

Steps To Properly Evaluate Your Waste

Is your waste excluded?



Is your waste listed?



Does your waste exhibit
a characteristic?

Excluded Wastes

Not subject to Ohio's hazardous waste regulations:

- [OAC rule 3745-51-04](#) Exclusions
 - Examples: Domestic sewage, NPDES discharge, non-terne-plated oil filters, shredded circuit boards, excluded scrap metal, household hazardous waste, solvent contaminated wipes

- [OAC rule 3745-51-06](#) Recyclable Materials
 - Examples: Used oil, contaminated wipes, and apparel

Listed Hazardous Wastes

F-Listed

Non-specific waste sources (F-listed)

- [OAC rule 3745-51-31](#)
- Means HW can be generated from any type of manufacturing process

Examples:

- Spent solvents
 - F001, F002, F003, F004, F005
- Spent electroplating operation wastes
 - F006, F007, F008, F009

F-Listing Table Example

Industry and EPA Hazardous Waste No.	Hazardous Waste	Hazard Code
F004	The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten per cent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten per cent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I, T)

Listed Hazardous Wastes

K-Listed

- Specific waste sources (K-listed)
 - [OAC rule 3745-51-32](#)
 - Waste is only generated from the specific type of industry and process given in the listing description

- Examples
 - Spent potliners from primary aluminum-K088
 - Iron and steel production
 - Electric arc furnace dust - K061
 - Spent pickle liquor - K062

K-Listing Table Example

Industry and EPA Hazardous Waste No.	Hazardous Waste	Hazard Code
Wood preservation K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
Inorganic pigments		
K002.....	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003.....	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004.....	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)

Listed Hazardous Wastes

P- or U-Listed

- Discarded commercial chemical products (P- and U-listed)
 - [OAC rule 3745-51-33](#)
 - Must be an unused commercial chemical product
- Examples of P-listed hazardous wastes:
 - Copper cyanide – P029
 - Phosgene – P095
- Examples of U-listed hazardous wastes:
 - Creosote – U051
 - Acetonitrile – U003

Characteristic Hazardous Wastes

Ignitable - OAC rule 3745-51-21

Corrosive - OAC rule 3745-51-22

Reactive - OAC rule 3745-51-23

Toxic - OAC rule 3745-51-24

Ignitable Hazardous Wastes

D001 Waste Code

- Liquid & flash point $<140^{\circ}\text{F}$ (except solution $<24\%$ alcohol by volume)
- Ignitable compressed gases
- Solids that spontaneously ignite & burn vigorously
- Oxidizers as defined DOT rules
- Examples include:
 - Solvents/degreasers
 - Some metal swarfs



Corrosive Hazardous Wastes

D002 Waste Code

- Aqueous solution; $\text{pH} \leq 2$ or $\text{pH} \geq 12.5$
- Liquid that corrodes steel at a specified rate
- Examples include:
 - Acids
 - Alkaline cleaning fluids
 - Waste battery acids



Reactive Hazardous Wastes

D003 Waste Code

- Explosive, unstable, reacts violently with water or generates toxic gas
- Examples include:
 - Dynamite
 - Waste peroxides and ethers



Toxic Hazardous Wastes

D004 –D043 Waste Codes

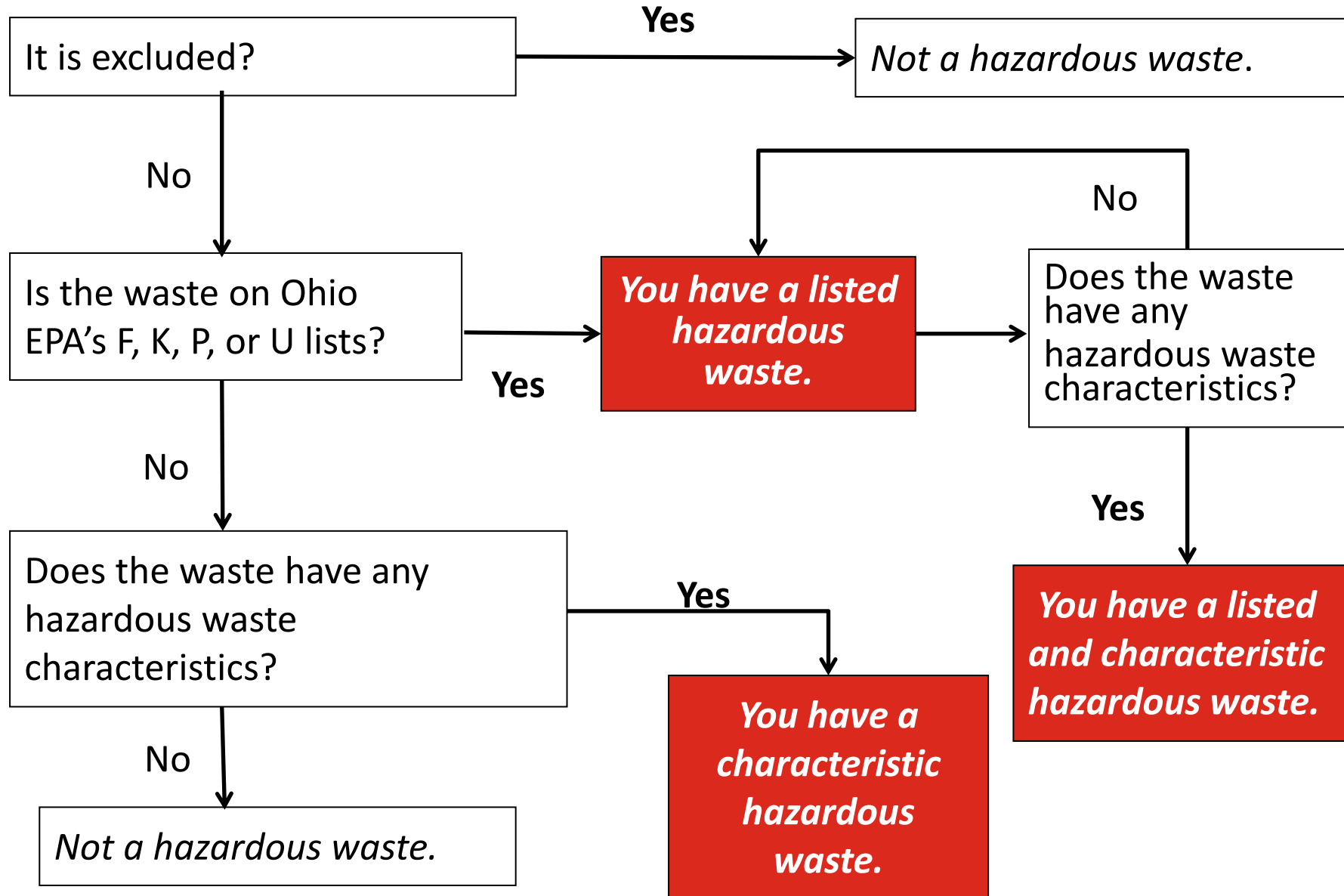
- Contains toxic constituents equal to or above regulatory levels
 - 8 metals; 32 organics
- Determined by Toxicity Characteristic Leaching Procedure (TCLP)
- Examples include:
 - Electronic equipment, most cathode ray tubes
 - Spent foundry sand, some clay poker chips, certain waste pesticides



Toxic Hazardous Waste Examples

Ohio EPA Hazardous Waste No.	Contaminant	CAS No	Regulatory Level (mg/l)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D006	Cadmium	7440-43-9	1.0
D007	Chromium	7440-47-3	5.0
D008	Lead	7439-92-1	5.0
D009	Mercury	7439-97-6	0.2
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0

Do I have a hazardous waste?



GENERATOR CATEGORIES

Generator Categories

Very Small Quantity Generator (VSQG)

Small Quantity Generator (SQG)

Large Quantity Generator (LQG)

Poll Question

What size generators do we have with us today?

- a) LQG
- b) SQG
- c) VSQG
- d) Not sure
- e) I'm a student, consultant, or TAP

Determining Your Category

Total weight of hazardous waste generated by the facility in one calendar month

- For example: Hazardous waste that you generate between October 1 and October 31

Total amount of hazardous waste on-site at any given time (only pertains to VSQGs and SQGs)

NOTE: Generator categories are NOT determined by the weight of waste shipped off-site or by averaging

[OAC rule 3745-52-13](#)



Determining Your Category

Quantity of Acute Hazardous Waste per Month	Quantity of Non-acute Hazardous Waste per Month	Quantity of Residues from Cleanup of Acute Hazardous Waste per Month	Generator Category
> 1 kg	Any amount	Any amount	LQG
Any amount	≥ 1,000 kg	Any amount	LQG
Any amount	Any amount	> 100 kg	LQG
≤ 1 kg	> 100 kg and < 1,000 kg	≤ 100 kg	SQG
≤ 1 kg	≤ 100 kg	≤ 100 kg	VSQG

Very Small Quantity Generators (VSQGs)

VSQGs:

- Generate no more than 220 pounds of hazardous waste in a calendar month; AND
- Never accumulate more than 2,200 pounds of hazardous waste on your property

Note:

- 220 pounds is about half of a 55-gallon drum
- 2,200 pounds is about five 55-gallon drums

[OAC Rule 3745-52-14](#)

Small Quantity Generators (SQGs)

SQGs:

- Generate more than 220 pounds but less than 2,200 pounds of hazardous waste/month; and
- Never accumulate over 13,200 pounds of hazardous waste on-site

[OAC Rule 3745-52-16](#)



Large Quantity Generators (LQGs)

LQGs:

- generate 2,200 or more pounds of hazardous waste/month

Note: No limit on amount of hazardous waste stored on-site

[OAC Rule 3745-52-17](#)

GENERATOR REQUIREMENTS

U.S. EPA Identification Number (12-digit)

VSQGs - Not Required

- Waste hauler might want you to have one

SQGs and LQGs – Required

Site specific, identifies company that created the waste

No fee – register at [myRCRAid \(RCRAInfo\)](#) or submit the [9029 Site ID form](#)

- [Notification of Regulated Waste Activity Web page](#)
- Need help? Call us: 614-644-2924

SQG and LQG Re-Notification

- SQGs are required to re-notify every 4 years using Form 9029
 - Started in 2021
 - Submitted by September 1
- LQGs are required to re-notify by March 1 of even-numbered years using Form 9029
 - Can be done as part of biennial report

Container and Tank Management Requirements

SQG
&
LQG

- Good condition
- Compatible with contents and area
- Marked with words “Hazardous Waste”
- Marked with indication of hazards

Marking and Labeling

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY
OR THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCE CONTROL
GENERATION INFORMATION:

NAME _____ PHONE _____
ADDRESS _____ STATE _____ ZIP _____
CITY _____
EPA MANIFEST
ID NO./DOCUMENT NO. _____
EPA _____ CA _____ ACCUMULATION
WASTE NO. _____ WASTE NO. _____ START DATE _____
CONTENTS COMPOSITION _____

PHYSICAL STATE: ☐ SOLID ☐ LIQUID ☐ GASEOUS ☐ FLAMMABLE ☐ TOXIC
☐ CORROSIVE ☐ REACTIVE ☐ OTHER _____

DO NOT MIX WITH OTHER HAZARDOUS WASTE UNLESS YOU ARE SURE IT IS SAFE TO DO SO.

HANDLE WITH CARE!



Health Hazard Blue Diamond

4-Deadly
3-Extreme Danger
2-Hazardous
1-Slightly Hazardous
0-Normal Material

Fire Hazard Red Diamond

Flash Points
4-Below 73°F
3-Below 100°F
2-Above 100°F
not exceeding 200°F
1-Above 200°F
0-Will not burn



Specific Hazard White Diamond

ACID - Acid
ALK - Alkali
COR - Corrosive
OX - Oxidizer
R - Radioactive
W - Use No Water

Reactivity Yellow Diamond

4-May Detonate
3-Shock & Heat
may detonate
2-Violent Chemical
change
1-Unstable if heated
0-Stable

Container or Tank

Portable Container



Stationary Tank



Container Management Requirements

- Closed (lids/bungs)
- Conduct weekly inspections
- LQG: Ignitable/reactive located 15 meters (50 feet) from facility's property line (LQG can get a waiver from fire department)
- LQG: U.S. EPA air emission standards (i.e., AA, BB, CC)

Container Management



Tank Management Requirements

- Only applies to SQGs and LQGs
- Large Quantity Generator Tank System Requirements

SQG: 3745-52-16(B)(3)

LQG: 3745-52-17(A)(5)



SQG Tank Management Requirements

- Show - emptied/turned over once every 180 days
- Daily/weekly inspections
- Remove all hazardous waste from site when facility closes

[OAC rule 3745-52-16\(B\)\(3\)](#)

LQG Tank Management Requirements

- Show - emptied/turned over once every 90 days
- Daily inspections
- Secondary containment
- Leak detection system

LQG Tank Management Requirements

- Tank system assessment/certification by PE
- Closure
- U.S. EPA air emission standards
(i.e., AA, BB, CC)

Satellite Accumulation

- Use of this rule reduces some regulatory requirements for storage areas
- Only applies to SQGs and LQGs

[Satellite Accumulation Guidance Document](#)

[OAC rule 3745-52-15](#)



Satellite Accumulation Area Requirements

- Up to 55 gallons of hazardous waste in containers at or near each point of generation
- Containers must be under control of the operator of the process which generated the waste
- Containers must be compatible with waste and in good condition – not leaking

Satellite Accumulation Area Requirements

Containers must be marked with the words “Hazardous Waste” AND an indication of the hazards of the contents



Satellite Accumulation Area Requirements

- Containers must remain closed except when:
 - adding or removing hazardous waste
 - temporary venting of a container is necessary
 1. For proper operation of equipment
 2. To prevent dangerous situations

What happens when I reach the 55-gallon limit?

- Move the container within 3 days
- Date the container
- Comply with accumulation requirements (180/90-day storage limits)



Poll Question

Background: A hazardous waste satellite accumulation area, one barrel has been full for over a week



What's wrong?

- a) Nothing labeled as “hazardous waste” and no indication of hazards
- b) Missing accumulation start date
- c) Too many containers
- d) Open container of waste
- e) All of the above

How long may I store HW on-site?

- **VSQGs** do not have any storage time limits
- **SQGs** can store hazardous waste on-site for up to 180 days; HOWEVER, if transporting a distance of 200 miles or more, can store for up to 270 days ([30-day extension available](#))
- **LQGs** can store hazardous waste on-site for up to 90 days (30-day extension available)

Hazardous Waste Treatment

Treatment - any method, technique, or process, designed to:

- render waste non-hazardous
- less-hazardous
- safer to transport, store, or dispose of
- amenable for recovery
- amenable for storage
- reduced in volume

Defined in [OAC rule 3745-50-10\(T\)\(13\)](#)

[Generator Treatment Guidance Document](#)

May I treat my hazardous waste on-site?

- **Allowed (without permit):**

- Neutralization
- Polymerization
- Stabilization
- Wastewater treatment



- **Not Allowed:**

- Thermal treatment (incineration, certain evaporators)
- Land disposal (surface impoundments, landfills)

- **90/180-day time limits still apply during treatment**

Shipping Waste Off-Site

VSQGs are not required to prepare a manifest (*unless they become an episodic generator*)

SQGs and **LQGs** must prepare manifest and:

- Package HW
- Label each package of HW
- Mark each package of HW
- Placard or offer the initial transporter the appropriate placards

Found in [OAC rules 3745-52-30 to 3745-52-33](#)

Shipping Waste Off-Site

Department of Transportation shipping requirements:

- Contact [Public Utilities Commission of Ohio](#) for more information (800-686-7826)



Manifesting Requirements

Manifests are HW tracking documents

U.S. EPA has info on where to get them



SQGs and **LQGs** must manifest their HW

- Each person who transports, stores, treats, or disposes must sign & retain a copy
- Must receive signed copy of your manifest from the final destination facility

OAC rules 3745-52-20 to 3745-52-23

National e-Manifest System

- U.S. EPA established a national system for tracking hazardous waste shipments electronically.
- This system, known as “e-Manifest,” modernized the nation’s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.
- EPA launched e-Manifest on June 30, 2018.
- <https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/reports-and-data/national-e-manifest-system>
- <https://www.epa.gov/e-manifest>

Land Disposal Restrictions (LDRs)

- Apply to SQGs and LQGs
- Standards developed to ensure that toxic constituents present in hazardous waste are properly treated before land disposal
- Under LDRs, generators need to complete a notification (one-time) which accompanies manifest to TSD facility
- TSDFs treat your HW to meet LDRs

[Land Disposal Restrictions \(An Overview\)](#)

Found in [OAC Chapter 3745-270](#)

Emergency Preparedness

SQGs and LQGs must:

- Maintain emergency equipment on-site
- Maintain and operate your facility to minimize the possibility of emergencies
- Test and maintain your emergency equipment ‘as necessary’ and record the inspections in a log



Emergency Preparedness

SQGs and LQGs must:

- Maintain adequate aisle space
 - Movement of personnel and emergency response equipment
- Make arrangements with local emergency responders & document arrangements

SQG: [OAC rules 3745-52-16\(B\)\(8\) and \(9\)](#)

LQG: [OAC rule 3745-52-17\(A\)\(6\)](#)

Emergency Procedures

SQG

Employee on site
or on call to act as
emergency
coordinator

Post information
next to phones or
in HW areas

LQG

Develop written
contingency plan

Have a quick
reference guide

Contingency Plan

- Implement plan provisions immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment
- Maintain all reports of contingency plan implementation on-file and report the incidents to Ohio EPA
- Maintain a copy of contingency plan at your facility & submit to local police, fire, hospitals, emergency response teams
- Submit a quick reference guide ([OAC rule 3745-52-262](#))

[Example contingency plan available](#)



Contingency Plan Content

- Actions to be taken in response to fires, explosions, or any unplanned release of hazardous waste
- Arrangements with local police departments, fire departments, hospitals, contractors, state and local emergency response teams to coordinate emergency services
- List of names and telephone numbers of persons qualified to act as emergency coordinator
- Emergency equipment (location, physical description, and capabilities)
- Evacuation plan where there is possibility that evacuation may be necessary

[OAC rule 3745-52-261](#)

Contingency Plan

Quick Reference Guide

New LQGs must submit a Quick Reference Guide when they submit their contingency plan to local emergency responders.

Pre-October 5, 2020 LQGs must submit a Quick Reference Guide at the time they next submit a revised contingency plan to local responders due to other necessary revisions.

Contingency Plan

Quick Reference Guide

Eight elements:

1. Types/names of hazardous wastes and hazards (e.g., toxic paint wastes, spent ignitable solvents)
2. Estimated maximum amount of each hazardous waste
3. Identification of hazardous waste requiring unique or special treatment

Contingency Plan

Quick Reference Guide **(continued)**

4. Map of the facility identifying where hazardous waste may be located
5. Street map of the facility and surroundings
6. Location of water supply
7. Information about on-site notification systems
8. Name of emergency coordinator and 24/7 phone number

LQG Closure Requirements

When an LQG closes an accumulation unit or their entire facility, a notification is required

- Place a notice in the operating record within 30 days after closing an accumulation unit
- Notify Ohio EPA 30 days prior to closing the facility
- Notify Ohio EPA within 90 days after closing an accumulation unit or entire facility that you met the closure performance standards

LQG Closure Requirements

- If an LQG needs more than 90 days, they must submit an extension request no later than 75 days after closure
- Closure does not apply to satellite accumulation areas, only central accumulation areas

Training Requirements

- **VSQGs** are not required to conduct personnel training
- **SQGs** must:
 - ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures
- **LQGs** must:
 - conduct classroom instruction or on-the-job personnel training for facility employees
 - conduct annual refreshers and keep records

SQG: [OAC rule 3745-52-16\(B\)\(9\)\(c\)](#)

LQG: [OAC rule 3745-52-17\(A\)\(7\)](#)

Training Requirements-LQG

- Facility personnel should be able to respond effectively to emergencies involving hazardous waste
- Employees should be familiar with:
 - Emergency procedures
 - Emergency equipment
 - Emergency systems
 - Contingency plan implementation

[OAC rule 3745-52-17\(A\)\(7\)\(a\)\(ii\) &\(iii\)](#)

Training Requirements-LQG

- Job titles for each position at the facility related to hazardous waste management, and the name of the employee filling each job

[OAC rule 3745-52-17\(A\)\(7\)\(d\)\(i\)](#)

- A written job description for each position listed under a job title description

[OAC rule 3745-52-17\(A\)\(7\)\(d\)\(ii\)](#)

Training Requirements-LQG

- A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (D)(1) of this rule

[OAC rule 3745-52-17\(A\)\(7\)\(d\)\(iii\)](#)

Training Requirements-LQG

- Records showing training or job experience has been completed

[OAC rule 3745-52-17\(A\)\(7\)\(d\)\(iv\)](#)

Training Requirements-LQG

- Records for current personnel must be kept until closure of the facility
- Records for former employees must be kept for at least three years from the date the employee last worked at the facility

[OAC rule 3745-52-17\(A\)\(7\)\(e\)](#)

Reporting Requirements

Exception Report

- Exception reports are part of the RCRA manifest tracking system
- After you send waste off-site for disposal, the TSDF is required to return to you a copy of the original manifest
- If you don't receive the manifest from the TSDF, then you must submit an exception report to Ohio EPA
 - SQGS- 60 days
 - LQGs- 45 days (contact transporter at 35 days)

[OAC rule 3745-52-42](#)



Reporting Requirements

Biennial Report



- Only LQGs file biennial reports
 - Includes episodic generators who became LQGs
 - Use eDRUMS in the eBusiness Center to file
 - <https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/reports-and-data/hazardous-waste-reporting>
- Report provides Ohio EPA and U.S. EPA with data concerning your facility's hazardous waste generation, management, and waste minimization activities
- Due by March 1 in even numbered years (***Reports were due last week***)

[OAC rule 3745-52-41](#)

Recordkeeping Requirements

VSQGs must be able to demonstrate:

- They've evaluated their waste
- Have ensured proper disposal



[OAC rules 3745-52-14 \(A\)\(2\) & \(A\)\(5\)](#)

Recordkeeping Requirements

Three
years*

- Test results
- Waste analysis
- Other determinations

*for at least three years after the date that the waste was last sent to on-site or off-site treatment, storage, or disposal

Recordkeeping Requirements

SQGs and LQGs must keep a copy of the following for at least 3 years:

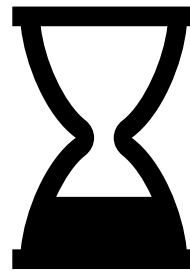
- Manifests
- LDRs
- Biennial reports



OAC rules [3745-52-40](#) and [3745-52-11\(F\)](#)

Recordkeeping Requirements

- Inventory logs or records to demonstrate tanks have been emptied within 180/90 days of entering



LQG Additional Recordkeeping Requirements

- Personnel training documents
- Contingency Plan
- Closure notification



Generator Requirements Summary Table

Generator Requirements Summary Table

- Management requirements
- OAC references
- VSQG, SQG, or LQG compliance requirements

Alternative Standards for Episodic Generation



Episodic Generation

Episodic Provisions:

- Generators are allowed up to 2 events per year without changing their generator category
- Only allowed one planned and one unplanned event
 - Need to petition for the 2nd event
 - Cannot have 2 planned or 2 unplanned events

[Hazardous Waste Episodic Generation Factsheet](#)

Episodic Generation Notification

Planned: Notify Ohio EPA using Form 9029 at least 30 days prior

Unplanned: Notify Ohio EPA within 72 hours via phone, email, or fax and subsequently submit Form 9029

<https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/permits-and-notifications/notification-of-regulated-waste-activity>



Episodic Generation

If you do not qualify for the episodic provisions:

- Must manage your hazardous waste under all applicable generator requirements
- If you reach LQG status at any time during the calendar year, you must file a [biennial report](#) (if the generation is in an odd year)

Poll Question

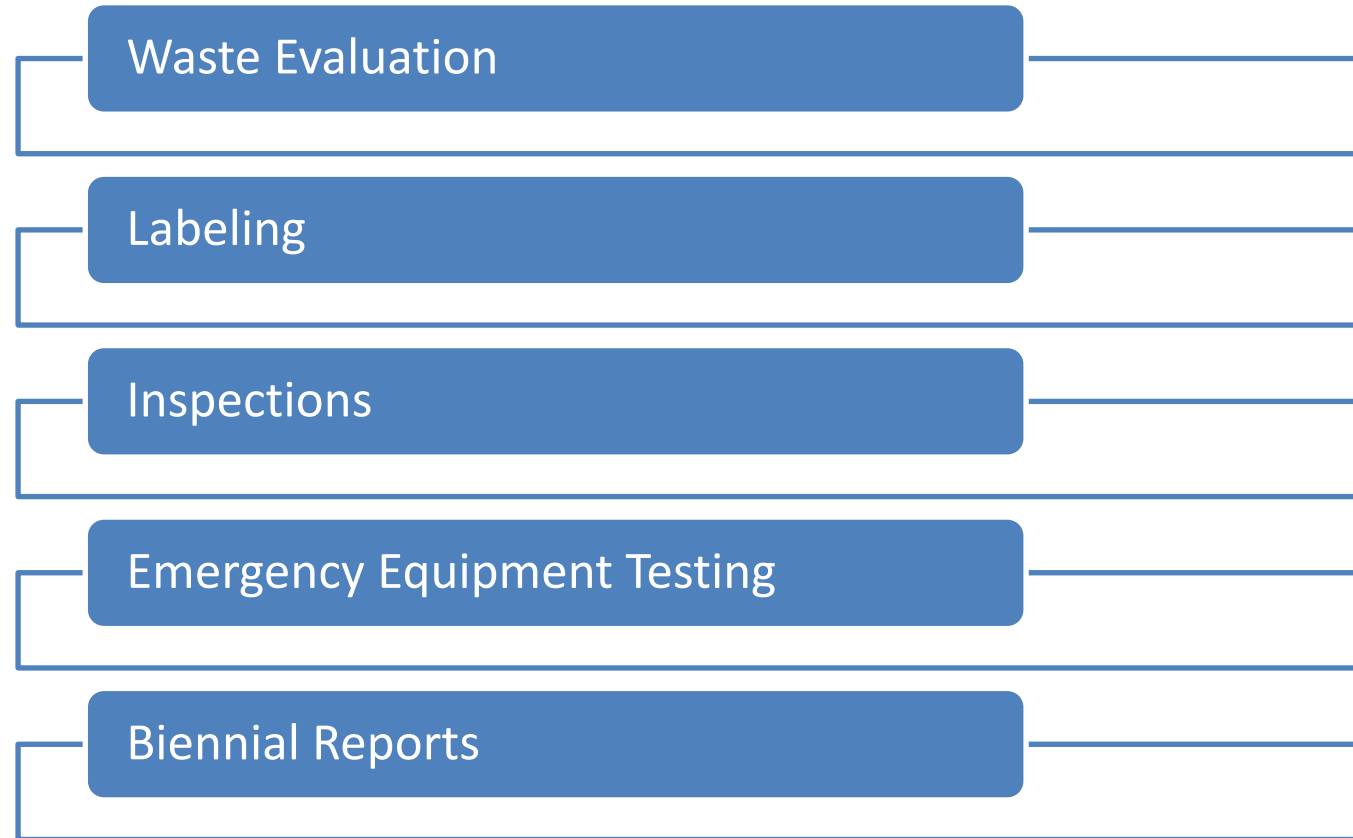


Under the episodic generation rules, could a facility that has had an unplanned episodic generation event, claim a second unplanned episodic event in the same year?

- a) Yes
- b) No

MOST COMMONLY CITED VIOLATIONS

Most Commonly Cited Violations



[Violations Most Frequently Cited Fact Sheet](#)

Avoiding Violations

Waste Evaluation



Don't throw **any** waste into the dumpster unless you have confirmed **and** demonstrated that it is **NOT** a hazardous waste

Avoiding Violations

Container Management

- Keep [containers closed](#) while in storage
- Do not open, handle, or store containers in a manner that will cause them to rupture or leak
- Conduct inspections of container storage areas, at least weekly, looking for signs of leaks or deterioration
- Record inspections in a [log or summary](#)

Avoiding Violations

Emergency Equipment

- Alarm systems, fire protection equipment, spill control equipment, and decontamination equipment must be tested and maintained as necessary to ensure proper operation in time of emergency
- Record inspections in [log](#) or summary



Avoiding Violations

Biennial Reporting

- OAC rule [3745-52-41](#)
- Due by March 1 of each even numbered year
- Only report hazardous waste; not universal waste or used oil
- Cover generator activities for the previous calendar year
- Check accuracy and completeness

RESOURCES



The Division of Environmental Response and Revitalization Program's site

Division Home Page

<https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization>

Hazardous Waste Programs Page

<https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/derr-programs/hazardous-waste>

Rules

<https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/regulations/effective-rules>

Publications/Guidance Documents/Inspection Checklists

<https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/guides-and-manuals/hazardous-waste-generator-requirements>



Recycling Resources

Ohio EPA Recycling Directory

<https://recyclesearch.com/profile/ohioepa-recycling-directory>

OCAPP Recycling Information and Recycling Market Development Grants

<https://epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/recycling>

Ohio Materials Marketplace

<https://ohio.materialsmarketplace.org/>



Guidance Documents

Hazardous Waste Generator Handbook

https://epa.ohio.gov/static/Portals/32/pdf/gen_handbook.pdf

Generator Requirements Summary Table

<https://epa.ohio.gov/static/Portals/32/pdf/GeneratorRequirementsTable.pdf>

Hazardous Waste Generator Requirements Guidance

<https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/guides-and-manuals/hazardous-waste-generator-requirements>

Additional Websites

How to Clean Up a Broken Mercury Lamp

http://ohioepa.custhelp.com/app/answers/detail/a_id/983/~/handling-a-broken-compact-fluorescent-lamp-%28cfl%29

DOT - Transportation of Lithium Batteries

<https://www.phmsa.dot.gov/lithiumbatteries>

U.S. EPA – RCRA On-Line (rule interpretations instructions)

<https://rcrapublic.epa.gov/rcraonline/>



Ohio EPA Resources

Ohio EPA's Customer Support Center

<https://ohioepa.custhelp.com/>

Division of Environmental Response and Revitalization

Hazardous Waste Compliance Assurance Section

Weekdays from 8 a.m. - 5 p.m.

(614) 644-2924

Office of Compliance Assistance & Pollution Prevention

([Chat and hotline available](#))

Weekdays, 8 a.m. – 5 p.m.

(800) 329-7518





QUESTIONS

We Value Your Feedback

Please take the post session survey
so we can continue to improve your
Ohio EPA webinar experience!



Encouraging Environmental Excellence



To learn more, visit epa.ohio.gov/ohioe3.
Visit our Customer Support Center at ohioepa.custhelp.com/app/apply to apply.

Encouraging Environmental Excellence (E3)

- Recognizes organizations for exceptional achievements in environmental stewardship
- For businesses, trade associations, professional organizations, non-profits, higher education institutions, etc.



Encouraging Environmental Excellence for Communities (E3C)

- Recognizes communities for exceptional achievements in environmental stewardship
- Open to local governments



Encouraging Environmental Excellence in Education (E4)

- Recognizes schools for their achievements in environmental stewardship and efforts to involve students in environmental topics
- Open to K-12 public or private schools



Thank you for attending!

Up Next

- March 8, BWC Safety Congress Environmental Day →
 - [Ohio EPA Air Pollution Permit Requirements](#) (1 p.m. – 2:00 p.m.)
 - [What to expect during an Ohio EPA Inspection](#) (3 p.m. – 4:00 p.m.)
- April 5, 2 p.m. – 3:00 p.m. → [Water Resource Restoration Sponsorship Program](#)

Register for Upcoming Sessions

- Visit our website at <https://epa.ohio.gov/about/media-center/events> to see the date and time for upcoming webinars and other Ohio EPA events
- Visit our website at epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/training to view recordings of sessions you may have missed
- Create an **Ohio EPA Customer Support Center Account** at <https://ohioepa.custhelp.com/> to receive email notifications of future webinars