



Hazardous Waste Requirements – The Basics

- September 24, 2020
 - 10:00 – 11:00 a.m. → Part 1
 - 2:00 – 3:00 p.m. → Part 2
- Kristie Shipley, Environmental Specialist
- Two-part session covering the basic requirements of the Resource Conservation and Recovery Act to help generators understand managing their hazardous waste, evaluating waste streams, and more.



2020 Virtual Compliance Assistance Conference



Welcome!

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An Overview of Ohio's
Hazardous Waste Requirements



An Overview of Ohio's Hazardous Waste Requirements

Presented by:

Kristie Shipley

Hazardous Waste Program

Division of Environmental Response & Revitalization

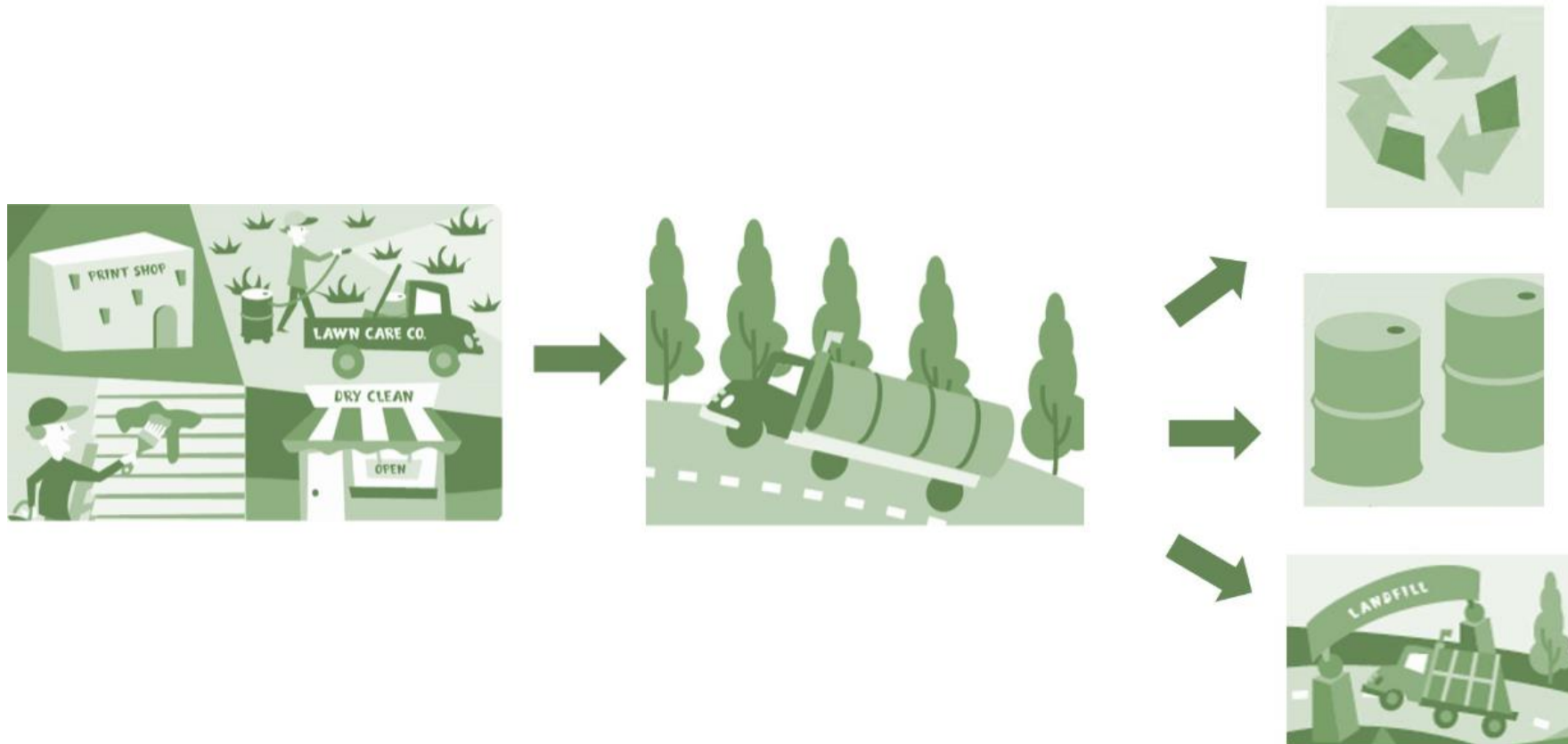


Learning Objectives

- Participants will understand how to evaluate a waste
- Participants will be able to identify generator category requirements
- Participants will be able to recognize common hazardous waste violations

Resource Conservation and Recovery Act (RCRA)

Cradle-To-Grave Management



THE CORNERSTONE OF RCRA

WASTE EVALUATION



Waste Evaluation Requirement



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

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.

******For a material to be a hazardous waste, it must be a waste.

What is a waste?

A waste is any material that will be discarded by:

- Disposal
- Burning
- Storing or treating in lieu of discard

A waste is any material that will be recycled by being:

- Used on the ground
- Burned for energy
- Speculatively accumulated

What is not a waste?

- Excluded waste
 - Wastes specifically defined in rule as not being a waste or a hazardous waste
- Materials that will be reused or reclaimed
 - Only applies to certain materials

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

Excluded wastes are not subject to Ohio's hazardous waste regulations.

- Found in Ohio Administrative Code (OAC) rule [3745-51-04](#)
 - Examples: Domestic sewage, NPDES discharge, non-terne-plated oil filters, shredded circuit boards, excluded scrap metal, household hazardous waste

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 #	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

Listed Hazardous Wastes - K-Listed

Industry and EPA Hazardous Waste #	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

Poll Question

A waste with pH <2 or > 12.5 is _____.

1. Ignitable
2. Reactive
3. Corrosive
4. Toxic

Characteristic Hazardous Wastes

Ignitable - OAC rule [3745-51-21](#)

Corrosive - OAC rule [3745-51-22](#)

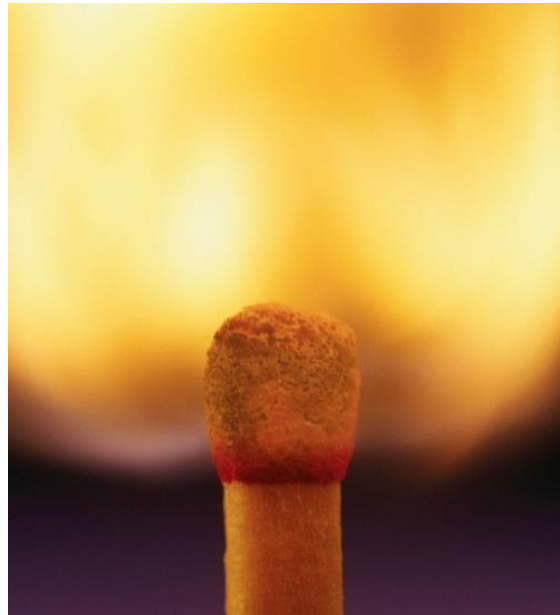
Reactive - OAC rule [3745-51-23](#)

Toxic - OAC rule [3745-51-24](#)

Ignitable Hazardous Wastes

D001 Waste Code

- Liquid & flash point < 140° 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

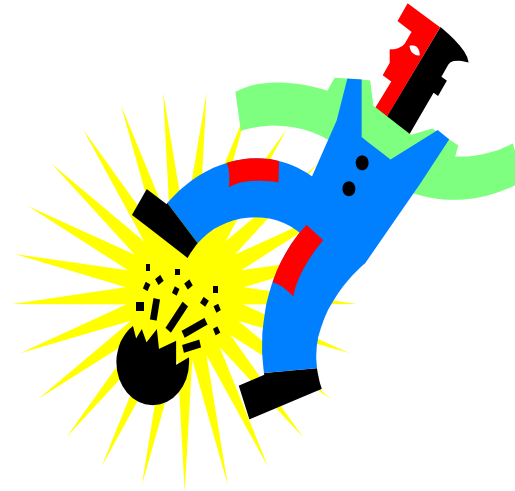
- Aqueous solution; $\text{pH} \leq 2$ or $\text{pH} \geq 12.5$
- Liquid that corrodes steel at a specified rate
- Examples include:
 - Acids
 - Alkaline cleaning fluids
 - Waste battery acids



Reactive Hazardous Wastes

D003 Waste Code

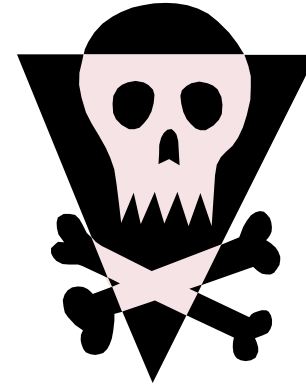
- Explosive, unstable, reacts violently with water, or generates toxic gas
- Examples include:
 - Dynamite
 - Waste peroxides and ethers



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 #	Contaminant	CAS #	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	Arsenic	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?

1. LQGs
2. SQGs
3. VSQGs

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

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
> 1kg	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)

You are a VSQG if you:

- 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

Very Small Quantity Generators (VSQGs)

Existing OAC rule [3745-51-05](#) – Special requirements for hazardous waste generated by very small quantity generators

New OAC rules 3745-52-14 (VSQG)
3745-52-13 (generator category)

What if I go over the VSQG limits?

- Generate more than 220 pounds of HW/month
 - You become either an SQG or an LQG if you generate more than 2,200 lb. for that month
- Accumulate more than 2,200 pounds of HW at any given time
 - You become an SQG until that HW is moved off-site

Small Quantity Generators (SQGs)

You are an SQG if you:

- 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

What if I go over the SQG limits?

- Generate more than 2,200 pounds of hazardous waste in a calendar month
 - You become an LQG until that hazardous waste is moved off-site
- Accumulate over 13,200 pounds of hazardous waste on-site
 - You become a treatment, storage, and disposal facility (TSDF) and must have a hazardous waste installation and operation permit

Large Quantity Generators (LQGs)

You are an LQG if you:

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

Note: LQGs do not have a limit on the amount of hazardous waste stored on-site

Episodic Generation

Episodic event: An activity that does not normally occur that causes a generator to exceed the calendar month quantity limits

[Fact Sheet: Episodic Generation](#)

Current regulation:

- Must manage your hazardous waste under all applicable generator requirements for hazardous wastes generated that month for as long as that waste remains on-site
- 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)

Episodic Generation

New regulation:

- 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
 - Can't have 2 planned or 2 unplanned events

Episodic Generation

Planned event: Generator prepared

- Regular maintenance
- Tank cleanouts
- Short-term projects
- Removal of excess chemical inventory

Episodic Generation

Unplanned event: Did not plan or reasonably expect to occur

- Production process upsets
- Product recalls
- Accidental spills
- Acts of nature

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

Episodic Generation

The petition for a 2nd event must include:

- Reason
- Estimated amount of hazardous waste
- How the hazardous waste will be managed
- Estimated time to complete management
 - Can't exceed 60 days
- Information on previous event

Episodic Generation

Additional requirements:

- Label containers as “Episodic Hazardous Waste”
- Keep records to identify the start date
- Ship off-site within 60 days of start date
- Use a manifest/ship to permitted TSDF

Generator Requirements

Hazardous Waste Determination

- Applies to all generators
- Failure to properly evaluate your waste may lead to unsafe conditions or violations from improper management
- OAC rule [3745-52-11](#)



Hazardous Waste Determination

New regulation:

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

Remember this!



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

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

VSQGs - Not Required – but...

- Waste hauler might want you to have one

SQGs and LQGs – Required

- Site specific, identifies company that created the waste
- No fee – just fill out 9029 Site ID form
 - <http://epa.ohio.gov/derr/hazwaste/notiform>
 - Need help? Call us: (614) 644-2924

SQG and LQG Re-Notification

New regulation:

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

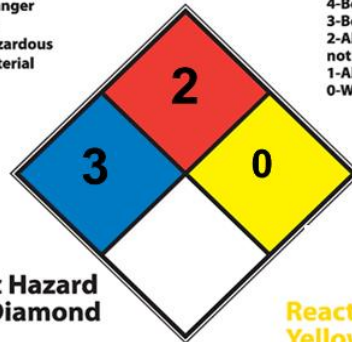
Marking and Labeling

- Applies to all generators
- Containers must be marked with the words “Hazardous Waste” AND an indication of the hazards of the contents (**new regulation**)



Health Hazard Blue Diamond

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



Specific Hazard White Diamond

ACID - Acid
ALK - Alkali
COR - Corrosive
OXY - Oxidizer
☢ - Radioactive
☞ - Use No Water

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

Reactivity Yellow Diamond

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



Satellite Accumulation

- Use of this rule reduces some regulatory requirements for storage areas
- Only applies to SQGs and LQGs
- [Satellite Accumulation Guidance Document](#)
- Current OAC rule [3745-52-34\(C\)](#)
- New 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

Poll Question

Once your 55-gallon satellite accumulation area container is full, how long can it remain in that location?

1. 10 days
2. 30 days
3. 3 days

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)

How long may I accumulate (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\(A\)\(125\)](#)

[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**

- **Consult with us if you wish to treat your hazardous waste**

Container or Tank

Portable Container



Stationary Tank



Container Management Requirements for SQGs and LQGs

- Only applies to SQGs and LQGs
- Must be in good condition
- Compatible with the hazardous waste and area
- Labeled as “Hazardous Waste” and include indication of hazards
- Closed (lids)
- Conduct weekly inspections

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.

GENERATOR INFORMATION:

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

PHYSICAL STATE: ☐ SOLID ☐ LIQUID
HAZARDOUS PROPERTIES: ☐ FLAMMABLE ☐ TOXIC
☐ CORROSIVE ☐ REACTIVITY ☐ OTHER _____

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

HANDLE WITH CARE!

EWSO Co., Inc. 1-800-440-3802 G81548

Container Management Requirements for SQGs and LQGs

- Label storage start date
- Maintain aisle space (as part of Preparedness and Prevention)
- Ignitable/reactive located 15 meters (50 feet) from facility's property line (**new regulation**-LQG can get a waiver from fire department)
- U.S. EPA air emission standards (i.e. AA, BB, CC) (LQGs only)

Container Management

Aisle Space



Tank Management Requirements

- Only applies to SQGs and LQGs
- [Large Quantity Generator Tank System Requirements](#)

Current: OAC [3745-66-90 through 3745-66-101](#)

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

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



SQG Tank Management Requirements

- Show - emptied/overtured once every 180 days
- Good condition
- Compatible with waste and area
- Labeled as “Hazardous Waste” and indication of hazards
- Daily inspections
- Remove all hazardous waste from site when facility closes

Current: OAC rule [3745-66-101](#) specific to SQGs

New: OAC rule 3745-52-(D)(3)

LQG Tank Management Requirements

- Show - emptied/overturned once every 90 days
- Good condition
- Compatible with waste and area
- Labeled as “Hazardous Waste” and indication of hazards
- Daily inspections

LQG Tank Management Requirements

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

Generator Requirements Summary Table

Generator Requirements Summary Table

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

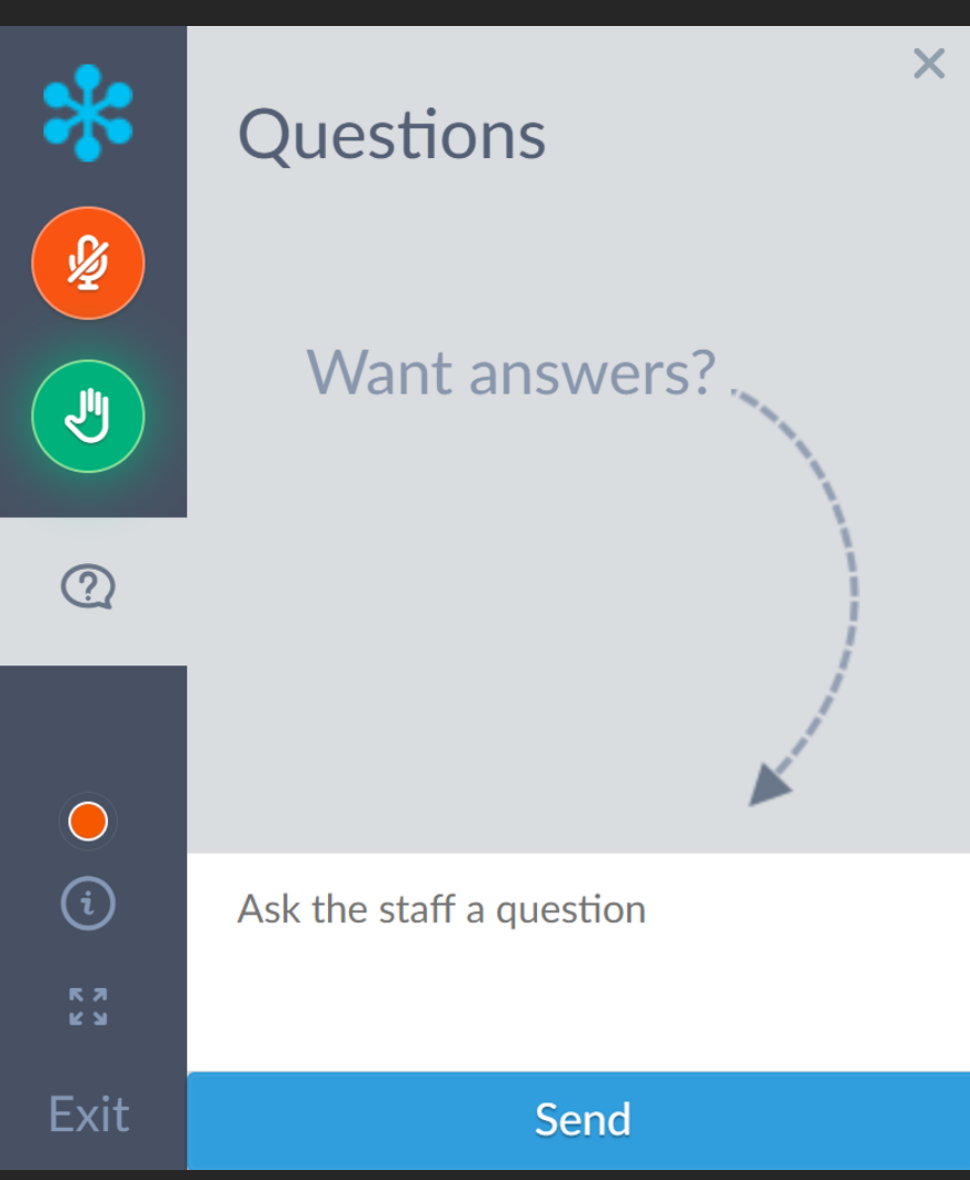
Poll Question



Background: Drum of refractory brick hazardous for lead (D008)

Can you spot the violations?

1. Not labeled as hazardous waste and indication of hazards
2. Missing accumulation start date
3. Open container
4. 1-3
5. Nothing, looks good!



Questions

- Please continue to submit your text questions and comments using the Questions Panel
- For more information please contact Kristie.Shipley@epa.ohio.gov.
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We Value Your Feedback

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



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Thank You For Attending!

Up Next

- 2:00 – 3:00 p.m. → Hazardous Waste Requirements – The Basics (Part 2)

Next Week – Tuesday, September 29

- 10:00 – 11:00 a.m. → Hazardous Waste Rules – What's Coming Down the Line?
- 2:00 – 3:00 p.m. → A Deeper Dive into the Universal Waste and Used Oil Rules

Don't Forget to Register!

- Visit our website for more details on upcoming conference sessions



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BREAK



Hazardous Waste Requirements – The Basics

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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)



VSQG Consolidation

New regulation:

- VSQGs can send hazardous waste to an LQG under the control of the same person
 - Marked as “Hazardous Waste” with indication of hazards
 - No manifest required
- Episodic events cannot be sent to LQG, must go to an authorized facility
 - Manifest required

Does my business need personnel training?

- 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

Current: OAC rules [3745-65-16](#) and [3745-52-34](#)

New LQG: OAC 3745-17(A)(7)

Emergency Preparedness

- No requirements for VSQGs
- SQGs and LQGs must:
 - ✓ Maintain emergency equipment on-site
 - ✓ Maintain and operate facility to minimize the possibility of emergencies
 - ✓ Test and maintain 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 authorities
 - **New regulation:** Must keep documentation that arrangements have been made with local emergency responders

Current: OAC rules [3745-65-30 to 3745-65-37](#)

New SQG: OAC rules 3745-52-16(B)(8) and (9)

New LQG: OAC rule 3745-52-17(A)(6)

Emergency Procedures & Contingency Plan

- SQGs – at least one employee on-site or on-call to respond to all emergencies
- LQGs – prepare and maintain a written contingency plan

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
- New requirement for a quick reference guide OAC rule 3745-52-262

[Example contingency plan available!](#)



Contingency Plan

New Quick Reference Guide

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

Existing: 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

New 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
4. Map of the facility identifying where hazardous waste may be located

Contingency Plan

***New Quick Reference Guide* (Continued)**

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

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
 - Each transporter must have a copy for their records
 - Destination facility must have a copy

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.
- U.S. EPA launched e-Manifest on June 30, 2018.

<http://epa.ohio.gov/derr/National-e-Manifest-System>



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

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



Exception Report

- VSQGs – Not Required
- SQGs – Required
 - If you do not receive a copy of the manifest signed by the designated facility within 60 days: Send exception report to Ohio EPA
- LQGs – Required
 - If you do not receive a copy of the signed manifest within 35 days: Contact transporter and/or the designated facility
 - If you do not receive a copy of the signed manifest within 45 days: Send exception report to Ohio EPA

Rejected Loads

- A shipment of hazardous waste that cannot be accepted because:
 - Facility permit restriction, or
 - Capacity limitations
- Includes all shipments in whole or in part regardless whether the manifest has been signed
- Generators can store rejected loads or residues sent back to them for 90 or 180 days depending on the amount of hazardous waste on-site during the calendar month the rejected load/residue was received

Poll Question

Who must file a biennial hazardous waste report?

1. Everyone who shipped hazardous waste off-site
2. Only LQGs
3. Only permitted treatment, storage, or disposal facilities

Biennial Report

- Only LQGs file [biennial reports](#)
 - Includes episodic generators who became LQGs
 - http://epa.ohio.gov/derr/hazwaste/annual_report
- 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

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



Land Disposal Restrictions (LDRs)

- These only 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](#)

Training Requirements

SQGs and LQGs must have a training program which teaches facility personnel hazardous waste management procedures relevant to their responsibilities

Current: OAC [3745-52-34](#)(D)(5)(c)

OAC [3745-65-16](#)(A)(2)

New LQG: OAC 3745-17(A)(7)

New SQG: OAC 3745-16 (B)(9)

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

Current: OAC [3745-65-16](#)(A)(3)

New: OAC 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

Current: OAC [3745-65-16](#)(D)(1)

New: OAC 3745-52-17(A)(7)(d)(i)

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

Current: OAC [3745-65-16](#)(D)(2)

New: OAC 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

Current: OAC [3745-65-16](#)(D)(3)

New: OAC 3745-52-17(A)(7)(d)(iii)

Training Requirements-LQG

Records showing training or job experience has been completed

Current: OAC [3745-65-16](#)(D)(4)

New: OAC 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

Current: OAC [3745-65-16](#)(E)

New: OAC 3745-52-17(A)(7)(e)

Training Requirements – Contingency Plan

New: OAC 3745-250 to 3745-52-265

- Actions to be taken in response to fires, explosions, or any unplanned release of hazardous waste [[3745-65-52](#)(A)]
- Arrangements with local police departments, fire departments, hospitals, contractors, state and local emergency response teams to coordinate emergency services [[3745-65-52](#)(C)]
- A current list of names, home addresses, and telephone numbers (home or cellular telephone numbers) of all persons qualified to act as emergency coordinator [[3745-65-52](#)(D)]
- A list of all emergency equipment, including, location, a physical description, and brief outline of capabilities [[3745-65-52](#)(E)]
- An evacuation plan for facility personnel where there is possibility that evacuation may be necessary [[3745-65-52](#)(F)]

New 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

New 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

Recordkeeping Requirements

The generator must keep records of any test results, waste analyses, or other determinations made in accordance with rule 3745-52-11

- 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

VSQGs must be able to demonstrate:

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



Current: OAC rule [3745-52-05\(G\)](#)

New: OAC rule 3745-52-14

Recordkeeping Requirements

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

- Manifests
- LDRs
- Biennial reports



Current: OAC rule [3745-52-40](#)

New: OAC rule 3745-52-40 and 3745-52-11

Recordkeeping Requirements

- Weekly container inspections
 - in a log or summary
- Emergency equipment inspections (as necessary)
 - in a log or summary
- Daily tank inspections (includes weekends)
 - in the operating record of the facility



LQG Additional Recordkeeping Requirements



- Everything mentioned previously
- Personnel training documents
- Contingency Plan
- Closure notification

Solvent Contaminated Wipes

Solvent Contaminated Wipes

Specifically, the rule includes:

- A conditional exclusion from the definition of solid waste for solvent-contaminated wipes sent for cleaning (“reusable wipes”) OAC rule [51-04](#)(A)(26)
- A conditional exemption from the hazardous waste rules for solvent-contaminated wipes sent for disposal (“disposable wipes”) OAC rule 51-04(B)(18)

Solvent Contaminated Wipes

Solvent-contaminated wipes that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are **not** eligible for the exclusions.

Solvent Contaminated Wipes

	Solvent-Contaminated Reusable Wipes	Solvent-Contaminated Disposable Wipes
Includes	➤ Wipes containing one or more F001-F005 listed solvents listed in § 261.31 or the corresponding P- or U- listed solvents found in § 261.33, including: - Acetone - Benzene - n-Butanol - Chlorobenzene - Creosols - Cyclohexanone - 1,2-Dichlorobenzene - Ethyl acetate - Ethyl benzene - 2-Ethoxyethanol - Isobutyl alcohol - Methanol - Methyl ethyl ketone - Methyl isobutyl ketone - Methylene chloride - Tetrachloroethylene - Toluene - 1,1,2- Trichloroethane - Trichloroethylene (<i>*For reusable wipes only.</i>) - Xylenes ➤ Wipes that exhibit a hazardous characteristic resulting from a solvent listed in part 261. ➤ Wipes that exhibit only the hazardous characteristic of ignitability when containing one or more non-listed solvents.	

Solvent Contaminated Wipes

	Solvent-Contaminated Reusable Wipes	Solvent-Contaminated Disposable Wipes
Does not include	➤ Wipes that contain listed hazardous waste other than solvents. ➤ Wipes that exhibit the characteristic of toxicity, corrosivity, or reactivity due to non-listed solvents or contaminants other than solvents.	➤ Wipes that contain listed hazardous waste other than solvents. ➤ Wipes that exhibit the characteristic of toxicity, corrosivity, or reactivity due to non-listed solvents or contaminants other than solvents. ➤ Wipes that are hazardous waste due to the presence of trichloroethylene.

Solvent Contaminated Wipes

- The final rule includes *conditions for the* exclusion of solvent contaminated wipes.
- Meaning that if one or more of the conditions are violated, the solvent contaminated wipes could lose their status and become subject to hazardous waste regulation from the point of generation.
- The conditions for both the reusable wipes and disposable wipes exclusion are practically the same, which should ease implementation and compliance.

Solvent Contaminated Wipes

Conditions:

1. Containers must be closed, non-leaking, and capable of holding free liquids
2. Labeled as “Excluded Solvent-Contaminated Wipes”
3. 180-day accumulation limit
4. No free liquids when sent off-site
5. Manage free liquids as hazardous waste
6. Documentation for the landfill or laundry facility
7. Disposal at municipal waste or industrial waste landfill/ laundry facility must have their discharge regulated under the clean water act

Poll Question

Can solvent-contaminated wipes be sent to a municipal solid waste landfill if all the conditions for the exclusion are met?

1. Yes
2. No

Solvent Contaminated Wipes - Guidance

The Management of Solvent Contaminated Wipes and Other Textiles Laundered for Reuse:

<http://epa.ohio.gov/Portals/32/Solvent%20Wipes.pdf>

Most Commonly Cited Violations

Most Commonly Cited Violations

- Failure to evaluate a waste
- Improper labeling
- Improper container management
- Not maintaining an inspection log
- Not testing or maintaining emergency equipment
- Not filing a biennial report correctly

[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 ([SQG](#), [LQG](#))

Avoiding Violations

Emergency Equipment

- OAC rule [3745-65-33](#)
- 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

- **Key Takeaways**

- Properly evaluate all waste streams.
- Track how much hazardous waste is generated per month.
- Follow the requirements for your associated generator category.
- When in doubt, reach out!

Resources

The Division of Environmental Response and Revitalization Program Website

Division Home Page

<http://epa.ohio.gov/derr/>

Hazardous Waste Programs Page

<http://epa.ohio.gov/derr/compliance>

Rules

<http://epa.ohio.gov/derr/derrrules/rcra#176615082-effective-rules>

Publications/Guidance Documents

https://epa.ohio.gov/derr/hazwaste/generator_requirements#177015210-guidance



Recycling Search Tool

Recyclers List

<https://ebiz.epa.ohio.gov/Recyclers/jsp/search.jsp>

Guidance Documents

Hazardous Waste Generator Handbook

www.epa.ohio.gov/portals/32/pdf/gen_handbook.pdf

Generator Requirements Summary Table

www.epa.ohio.gov/portals/32/pdf/GeneratorRequirementsTable.pdf

Hazardous Waste Generator Guidance Requirements

http://epa.ohio.gov/derr/hazwaste/generator_requirements#177015210-guidance

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 Batteries

<http://www.prba.org/wp-content/uploads/Overview-of-Battery-Transport-Regulations.pdf>

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

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



Ohio EPA Resources

[Information and Resources from Ohio EPA](#)

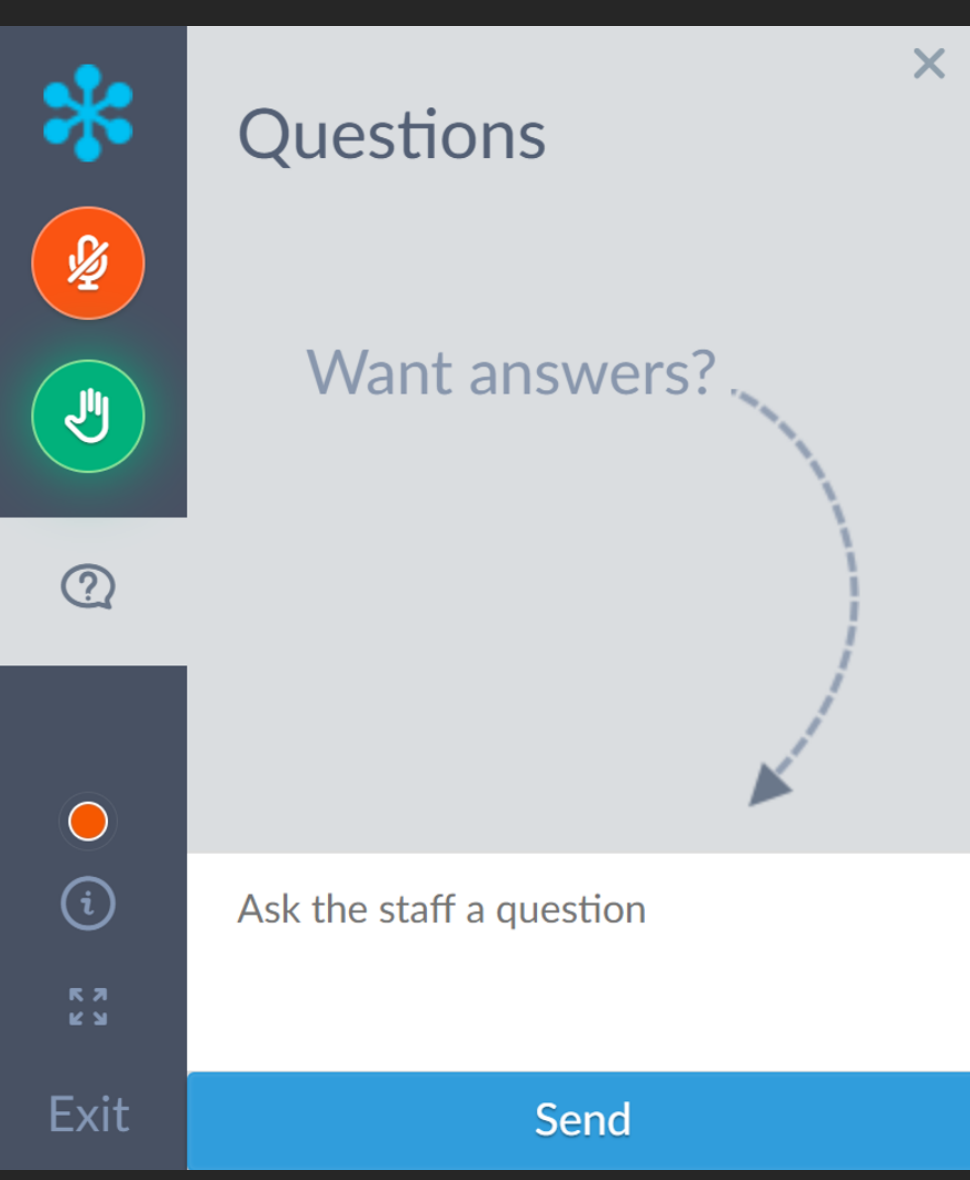
[Answer Place](#)

Division of Environmental Response and Revitalization
Hazardous Waste Compliance Assistance
Weekdays from 8 a.m. – 5 p.m.
(614) 644-2924

Office of Compliance Assistance & Pollution Prevention
Weekdays, 8 a.m. - 5 p.m.
(800) 329-7518



Questions?



Questions

- Please continue to submit your text questions and comments using the Questions Panel
- For more information please contact Kristie.Shipley@epa.ohio.gov.
- Note: Today's presentation is being recorded. The presentation slides can be found by clicking on the Handouts Section of your control panel. A certificate and recording of the webinar will be sent in a follow-up email.



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2020 Virtual Compliance Assistance Conference



Thank You For Attending!

Next Week – Tuesday, September 29

- 10:00 – 11:00 a.m. → Hazardous Waste Rules – What's Coming Down the Line?
- 2:00 – 3:00 p.m. → A Deeper Dive into the Universal Waste and Used Oil Rules

Don't Forget to Register!

- Visit our website for more details on upcoming conference sessions



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