

Hazardous Waste Generator Improvements Rule

ARKANSAS
ENERGY & ENVIRONMENT



Module 1

- Purpose of this training
- History of the Rule
- Generator universe
- Goals of the Final Rule
- Reorganization of the Generator Regulations
- New definitions
- Specific revisions to §262.10

Purpose of This Training

- Provide information on this new rule to the regulated community
- Describe and explain in detail the changes
- Answer questions from participants

History of the Rule

- Since 2004, EPA's Office of Resource Conservation & Recovery (ORCR) took a number of non-regulatory actions to improve the generator program
- EPA determined that many issues could only be resolved through rulemaking

History of the Rule

- September 25, 2015: EPA proposed the Generator Improvements Rule
- Over 230 comments were received
- Final Rule was published November 28, 2016

Arkansas' Generator Universe

Generator Category	Number of Facilities
CESQG	1547
SQG	248
LQG	190
Total	1985

Goals of the Final Rule

- Reorganizes the regulations to make them more user-friendly
- Provides greater flexibility for generators to manage waste
- Addresses gaps identified in the regulations
- Clarifies certain components

Reorganization of the Generator Regulations

Provision	Previous Citation	New Citation
Generator Category Determination	§261.5(c) – (e)	§262.13
VSQG Provisions	§261.5(a), (b), (f) – (g)	§262.14
Satellite Accumulation Area Provisions	§262.34(c)	§262.15
SQG Provisions	§262.34(d) – (f)	§262.16
LQG Provisions	§262.34(a), (b), (g) – (i), (m)	§262.17

New Definitions

- Acute hazardous waste
- Non-acute hazardous waste
- Central accumulation area
- Large quantity generator
- Small quantity generator
- Very small quantity generator

New Definitions

- **Condition for Exemption:** an event, action or standard that must be met in order to obtain an exemption from permitting
- **Independent Requirement:** a requirement of Section 262 that states an event, action, or standard that must occur or be met; and that applies without relation to the purpose of obtaining a conditional exemption from permitting

Revisions to §262.10

- Revised to clarify the structure of the regulations and remove obsolete provisions
- Updated to reflect the new structure, but still point generators to counting requirements, import and export requirements, and regulations for academic laboratories

Module 2

- Hazardous waste determinations
- Counting and hazardous waste generator categories
- Mixtures
- Marking and labeling

Hazardous Waste Determinations

What changed?

- Clarifies and emphasizes that waste determinations must be accurate
- Confirms when waste determination must be made
- Describes how to determine if a solid waste is either listed or characteristic
- Includes required records to be kept

Hazardous Waste Determinations

- Must identify all applicable waste codes based on the waste determination
- The generator is ultimately responsible for the determination

Counting & Hazardous Waste Generator Categories

- §262.13 clarifies the process for a generator to determine its generator category each calendar month
- A generator's category can change from month to month

Counting & Hazardous Waste Generator Categories

Generator Category	Quantity of Acute Hazardous Waste	Quantity of Non-Acute Hazardous Waste	Quantity of Residues From a Cleanup of Spilled Acute Hazardous Waste
VSQG	≤ 1 kg	≤ 100 kg	≤ 100 kg
SQG	≤ 1 kg	> 100 kg and < 1000 kg	≤ 100 kg
LQG	Any amount	Any amount	> 100 kg
LQG	Any amount	≥ 1000 kg	Any amount
LQG	> 1 kg	Any amount	Any amount

Mixtures

- Reorganization distinguishes VSQG mixing requirements from SQGs and LQGs
 - VSQGs must count the solid waste & hazardous waste mixture towards their generator category for that given month
(if the mixture is a hazardous waste)

Mixtures

- SQGs and LQGs are subject to:
 - The mixture rule in §261.3;
 - The hazardous waste determination requirement of §262.11
 - The prohibition of dilution rule in §268.3
 - The land disposal restrictions of §268.40 if a characteristic hazardous waste is mixed with a solid waste & no longer exhibits the characteristic

Marking & Labeling

- What changed?
 - Containers & Tanks must have the words “Hazardous Waste” AND the hazards of the contents
 - Containment Buildings must have a sign in a conspicuous place with the words “Hazardous Waste” AND the hazards of the waste

Marking & Labeling

- Marking of hazards was added to improve risk communication for workers, waste handlers, emergency responders, and visitors
- Some flexibility to comply with this requirement:
 - DOT hazard communication
 - OSHA hazard pictogram
 - NFPA chemical hazard label

Examples to Indicate Hazards

- RCRA



Examples to Indicate Hazards

- DOT



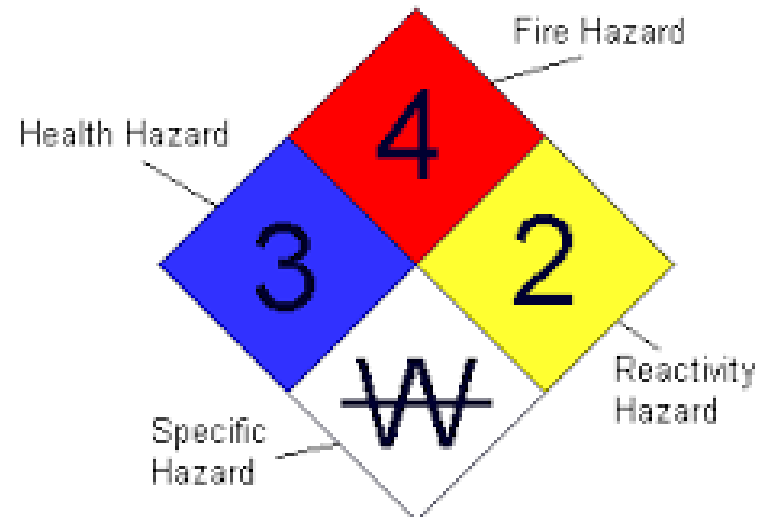
Examples to Indicate Hazards

- OSHA



Examples to Indicate Hazards

- NFPA



Marking & Labeling

- **Clarifications:**
 - Labeling should occur at the initial point of generation
 - For containers that have small containers inside, generators can mark the outer/secondary container or attach a tag with the required information

Marking & Labeling

- Generators must add the RCRA waste codes before shipping off-site

HAZARDOUS WASTE

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

GENERATOR INFORMATION:
NAME Generic College
ADDRESS 123 College Street PHONE (800)123-4567
CITY College Town STATE CT ZIP 06032

MANIFEST TRACKING NO. 123456789ABC ACCUMULATION START DATE 12/10/2007

EPA ID NO. CTD000123456 EPA WASTE NO. D002

Waste Corrosive Liquids, N.O.S., 8, UN 1103 III (Sulfuric Acid, Hydrochloric Acid)

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

HANDLE WITH CARE!

STYLE WMB

LABELMASTER® (800) 621-5808 www.labelmaster.com

Description of hazards of waste:
Corrosive

Waste code

Module 3

- VSQGs
- Episodic Generation
- VSQG Consolidation

Very Small Quantity Generators (VSQG)

- Same basic standards, but are now located in §262.14
- The new rule provides options for flexibility
 - Episodic Generation
 - Consolidation at an LQG under the same company

Episodic Generation

- Previous rules lacked flexibility to address planned or unplanned “episodic” changes in generator status

Episodic Generation

- Applicable to VSQGs and SQGs
- New Section 262 Subsection L allows generators that temporarily change their generator category as a result of an episodic event to operate under streamlined regulations
- All hazardous waste from episodic events must be shipped by a permitted transporter on a manifest to a TSD

Episodic Generation

- **Episodic event**: an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous waste that exceeds the calendar month quantity limits for the generator's usual category

Episodic Generation

- **Planned Episodic Event**: an episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory

Episodic Generation

- **Unplanned episodic event**: an episodic event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or “acts of nature,” such as tornado, hurricane, or flood

Episodic Generation

- Events per year:
 - One episodic event per year + one opportunity to petition DEQ for a second event
 - For example:
 - A generator conducts a clean out in the spring and then has an unexpected recall in October
 - A generator plans a small episodic project in the fall, but a tornado causes facility damage in July

Episodic Generation

Duration of an Episodic Event:

- The first day of an episodic event is the first day of generation of waste for the event—for an unplanned event, this is the first day of the storm, spill, other unexpected event
- An episodic event can last 60 days

Episodic Generation

Duration of an Episodic Event (continued):

- All hazardous waste must be shipped off site by the end of 60 days or that waste counts toward the generator's category and must be managed under the regulations for that category of generator

Episodic Generation

Duration of an Episodic Event (continued):

- Time frame should allow waste from unplanned events to be characterized and allow arrangements for disposal to be made

Episodic Generation

Notification

- Both VSQGs and SQGs must notify about episodic events using Site ID form (EPA form 8700-12)
- Planned event: notify 30 or more days prior to the episodic event on Site ID form
- Unplanned event: notify within 72 hours of the event by phone or email and follow up with Site Id form

Episodic Generation

Notification elements

- A VSQG must get an EPA ID number
- Start and end dates of the episodic event (no more than 60 calendar days)
- Reason for the event
- Types of hazardous waste
- Estimated quantities of hazardous waste
- Emergency coordinator contact information

Episodic Generation

Hazardous Waste Accumulation Standards

- VSQGs
 - Marking and labeling:
 - "Episodic hazardous waste;"
 - An indication of the hazards of the contents; and
 - The date the episodic event began
 - For tanks, inventory logs or other records are appropriate, but must be accessible

Episodic Generation

- VSQGs
 - Manage the hazardous waste in a manner that minimizes the possibility of an accident or release
 - Containers should be in good condition, chemically compatible with contents, and kept closed
 - Section 265 Subsection I would satisfy this condition
 - Tanks must have procedures in place to prevent overflow and must be inspected at least once each operating day

Episodic Generation

- Hazardous waste on drip pads or in containment buildings cannot be managed under Subsection L, Episodic Generation

Episodic Generation

Hazardous Waste Accumulation Standards

- SQGs
 - Marking and labeling:
 - "Episodic Hazardous Waste;"
 - An indication of the hazards of the contents; and
 - The date the episodic event began
 - For tanks, inventory logs or other records are appropriate, but must be accessible
 - All conditions of **262.16** (e.g., container and tank standards, employee training, emergency preparedness and prevention)

Episodic Generation

- Hazardous waste on drip pads or in containment buildings cannot be managed under Subsection L, Episodic Generation

Episodic Generation

- Recordkeeping
- Records must be maintained for 3 years from the completion of each event

Episodic Generation

- **Recordkeeping Elements**

- Beginning and end date of the episodic event
- A description of the episodic event
- Types of hazardous wastes generated
- Quantities of hazardous wastes generated
- How the hazardous waste was ultimately managed and the name of the RCRA-designated facility or facilities that received the hazardous waste
- Name of the hazardous waste transporter(s)
- Approval letter from DEQ if a petition was submitted and approved for a second event

Episodic Generation

- Recordkeeping

- Copies of the notification form and the hazardous waste manifest cover most of the elements.

Episodic Generation

- Petition for a second event
 - Not automatic...it must be approved by DEQ prior to the event

Episodic Generation

- Petition Requirements
 - Made in writing
 - Include:
 - Reason for the event
 - Nature of the event
 - Estimated amount of hazardous waste to be managed
 - How the waste will be managed
 - Estimated length of the episodic event
 - Information about the previous event in the calendar year

Episodic Generation

- For a planned second event:
 - Petition submitted to DEQ 30 or more days prior to the event

NOTE: Generator may not manage hazardous waste from a planned second episodic event under Subsection L until approval is received

Episodic Generation

- For an unplanned second event:
 - Must notify DEQ within 72 hours by phone or email, followed by submittal of Site Id form (8700-12) and an indication that this is a petition for a second event
 - Waste may be managed under Subsection L for an unplanned second event while awaiting approval of the petition

Episodic Generation

- For an unplanned second event:
- If a petition is denied, the generator must start managing hazardous waste under the applicable generator category

VSQGG Waste Consolidation at LQGs

- May consolidate waste at an LQG under the control of the same person.

VSQG Waste Consolidation at LQGs

- Person, defined in §260.10: An individual, corporation, company, firm, partnership, association, trust, joint stock company, joint venture, state or federal agency or instrumentality, county, town, or municipal authority, trust venture or any other legal entity, or combination of entities however organized.

VSQG Waste Consolidation at LQGs

- Control: means the power to direct policies at the facility

VSQG Waste Consolidation at LQGs

- VSQG standards:
 - Mark and label waste containers with “Hazardous Waste” and the hazards
 - Manifest is not required
 - Do not have to use a permitted transporter

VSQG Waste Consolidation at LQGs

- LQG standards:
 - Notifies DEQ 30 days prior to receiving the first shipment
 - Using Site Id form (8700-12) and identifies the VSGQs
 - Adds accumulation start date to VSQG hazardous labels when waste arrives at LQG
 - Manages consolidated waste as LQG waste

VSQG Waste Consolidation at LQGs

- LQG standards:
 - Maintains records of shipments for 3 years
 - Must identify the name, site address, and contact information for the VSQG
 - Must include a description of the hazardous waste received, including the quantity and date it was received

VSQG Waste Consolidation at LQGs

- LQG standards:
 - Reports on Annual Report
 - New source code (G51) for the VSQG waste to distinguish from the LQG's own waste

Module 4

- Satellite Accumulation Areas
- Waiver to 50-foot Requirement
- Waste Accumulation in Drip Pads & Containment Buildings
- Personnel Training for LQGs
- Emergency Preparedness & Planning
- Closure

Satellite Accumulation Areas

- A location at a generator's facility where the generator accumulates up to 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) in containers that are 1) at or near any point of generation, and 2) under the control of the operator
- Now found in their own part of the generator regulations! §262.15

Satellite Accumulation Areas

- Revisions to the SAA standards:
 - Explicitly states incompatible wastes can't be mixed
 - Must be closed...unless:
 - Adding or removing waste
 - Temporary venting is necessary (i.e., for safety reasons)
 - Must be marked or labeled “Hazardous Waste”
 - Must be marked with the hazards of the waste

Satellite Accumulation Areas

- Clarifies that “three days” means consecutive calendar days for when waste must be moved to the Central Accumulation Area (CAA)

Waiver to the 50-Foot Requirement

- LQGs can apply for a site-specific variance from the jurisdiction over the fire code (e.g., fire marshal or fire department)
- LQG must keep the written approval in their records

Drip Pads

- Clarifies that SQGs may accumulate hazardous waste on drip pads provided:
 - Section 265 Subsection W standards are met
 - Conditions for accumulating hazardous waste are met

Drip Pads

- Clarified in the preamble that VSQGs may accumulate hazardous waste on drip pads provided they comply with Section 265 Subsection W standards

Containment Buildings

- Clarifies that SQGs may accumulate hazardous waste in containment buildings provided:
 - Section 265 Subsection DD standards are met
 - Conditions for accumulating hazardous waste are met

NOTE: SQGs only have 90 days to accumulate hazardous waste in containment buildings

Personnel Training for LQGs

- Explicitly allows for the use of computer-based tools

Emergency Preparedness & Planning

- SQG requirements found in §262.16(b)(8) & (9)
- LQG requirements: §262.17(a)(6) refers you to §262 Subsection M

SQG Preparedness & Prevention

- Required equipment:
 - Internal communications or alarm system
 - Telephone or 2-way radio
 - Fire control equipment and decon equipment
 - Water at adequate volume to supply sprinklers, water spray systems, etc.

SQG Preparedness & Prevention

- Testing & maintenance of equipment
 - Must be tested and maintained to assure proper operation

SQG Preparedness & Prevention

- All personnel involved in hazardous waste operations must have immediate access to:
 - Internal alarm system; or
 - Emergency communication device

SQG Preparedness & Prevention

- Must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.

SQG Preparedness & Prevention

- Must attempt to make arrangements with the local police, fire, emergency response contractors, and local hospitals to familiarize them with
 - The layout of the facility
 - Properties of hazardous waste handled
 - Evacuation routes

SQG Preparedness & Prevention

- Keep records of the arrangements
 - Document confirmation of the arrangements; or
 - Document attempts to make the arrangements

SQG Preparedness & Prevention

- May request a waiver from the requirement to make arrangements with the local fire department
 - Must request from the authority having jurisdiction over the fire code (fire department, fire marshal)
 - Must keep waiver in the operating record

SQG Emergency Procedures

- Must be at least one employee on-site or on call to coordinate emergency response measures (Emergency Coordinator)

SQG Emergency Procedures

- Post the following next to the telephone or in areas directly involved with the generation and accumulation of hazardous waste:
 - Name and telephone number of the Emergency Coordinator
 - Location of fire extinguishers and spill control equipment
 - Telephone number of the fire department (unless the facility has a direct alarm)

SQG Emergency Procedures

- Must ensure all employees are thoroughly familiar with proper waste handling and emergency procedures

SQG Emergency Procedures

- Emergency Coordinator or designee must:
 - Respond to any emergencies that arise
- If fire, explosion, or other release could threaten human health outside the facility; or
- A spill has reached surface water...
- Must immediately notify the NRC

LQG Preparedness, Prevention, & Emergency Procedures

- Now found in Rule 23 Section 262 Subsection M
- Revised to clearly specify that emergency planning & preparedness standards apply where hazardous waste is being generated or accumulated

LQG Contingency Plan

- What's new?
 - Quick Reference Guide
 - Designed to provide easy access for emergency responders to the most critical information for an immediate response to an event

Quick Reference Guide

- “New” LQGs must include a Quick Reference Guide in the Contingency Plan
- “Existing” LQGs must include a Quick Reference Guide when the Contingency Plan is revised/updated

Quick Reference Guide

- Types of hazardous waste & associated hazards
- Estimated maximum amounts of hazardous waste on-site
- Hazardous waste requiring unique/special treatment (e.g., water reactive, etc.)
- Map showing where hazardous wastes are generated, accumulated, or treated

Quick Reference Guide

- Map of facility and surroundings to identify routes of access and evacuation
- Location of water supply
- Identification of on-site notification systems
- Name of Emergency Coordinator or listed staff positions & 24-hour emergency numbers

Arrangements with Local Authorities

- Specifies that records must be kept to document the attempt to make arrangements with local authorities

Emergency Coordinator

- No longer required to have home addresses
- Only required to have names and emergency telephone numbers of all persons qualified to act as the Emergency Coordinator

Closure

- Requires LQGs to notify the state when closing a facility or an accumulation unit
 - Clarifies that closure does not apply to SAAs

Closure

(Waste Accumulation Units)

- Place a notice in the operating record within 30 days after closure identifying the location of the unit(s); or
- Meet the closure performance standards of §262.17(a)(8)(iii) for containers, tanks, and containment buildings
- For drip pads, meet the closure performance standards of §262.17(a)(8)(iv)

Closure

(Waste Accumulation Units)

- Meet the closure performance standards of §262.17(a)(8)(iii) for containers, tanks, and containment buildings
- For drip pads, meet the closure performance standards of §262.17(a)(8)(iv)
- Notify the state via Site Id form

Closure (Facility)

- Notify via Site Id form
 - 30 days prior to closing the facility and
 - 90 days after closing the facility to certify they met closure performance standards

Closure Standards

- For container, tank systems, and containment buildings
 - Minimize and control releases of hazardous waste and constituents to the environment
 - Remove or decontaminate all contaminated equipment, structures, and soil
 - If unit can't be clean closed, must close as a landfill

Closure Standards

- For drip pads
 - Minimize and control releases of hazardous waste and constituents to the environment
 - Comply with §265.445(a) and (b)

Module 5

- Recordkeeping
- Reporting

New Recordkeeping Requirements

- Episodic generation
- VSQG consolidation
- Tanks
- Closure (waste accumulation units)
- 50-foot waiver
- Arrangement with local authorities

New Recordkeeping Requirements

- **Episodic generation**
 - Maintain records of episodic event and any approved petitions for 3 years
- **VSQG consolidation at LQG**
 - LQG is required to keep records of shipments from the VSQG for 3 years
 - Must identify the name, site address & contact information for the VSQG
 - Must include a description of the hazardous waste received, including the quantity and the date received

New Recordkeeping Requirements

- Tanks

- Use logs, monitoring equipment, or other records to demonstrate that hazardous waste is either emptied or removed from the tank within 180 days or 90 days
- Records must be kept on site and readily available for inspections

***Bottom Line:** Methods used to demonstrate that a tank has been emptied, must be reasonable & easily discernible.

New Recordkeeping Requirements

- **Closure of waste accumulation unit**
 - Maintain information of closed units as part of operating record
- **50-Foot Waiver**
 - Maintain approval of waiver as part of operating record
- **Arrangements with local authorities**
 - Maintain record of arrangements or attempt to make arrangements as part of operating record

Summary of New Reporting Requirements

- **SQG Re-notification**
 - Will be satisfied through Annual Report
- **LQGs receiving waste from VSQGs**
 - Site Id Form and GM form of Annual Report
- **Episodic Generation**
 - Site Id Form
- **Annual Report from facilities not storing hazardous waste prior to recycling**

Summary of New Reporting Requirements

- **Closure** (for facility or waste accumulation units)
 - Site Id Form
- **Quick Response Guide**
 - To local emergency responders

Resources

EPA's main generator website: <https://www.epa.gov/hwgenerators>

Generator Improvements Rule website:
<https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements>

Link to the map of states that have adopted the new rule:
<https://www.epa.gov/hwgenerators/where-hazardous-waste-generator-improvements-rule-effect>

FAQs for implementing the new rule:
<https://www.epa.gov/hwgenerators/frequent-questions-about-implementing-hazardous-waste-generator-improvements-final-rule>

Points of Contact



ENVIRONMENTAL QUALITY

Penny J. Wilson

Compliance Branch Manager

t: 501.682.0868 | c: 501.837.6981

wilson@adeq.state.ar.us

Carolyn Pollard

Inspector Supervisor

t: 501.682.0850 | c: 501.913.4853

pollard@adeq.state.ar.us



Questions



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Thank you!