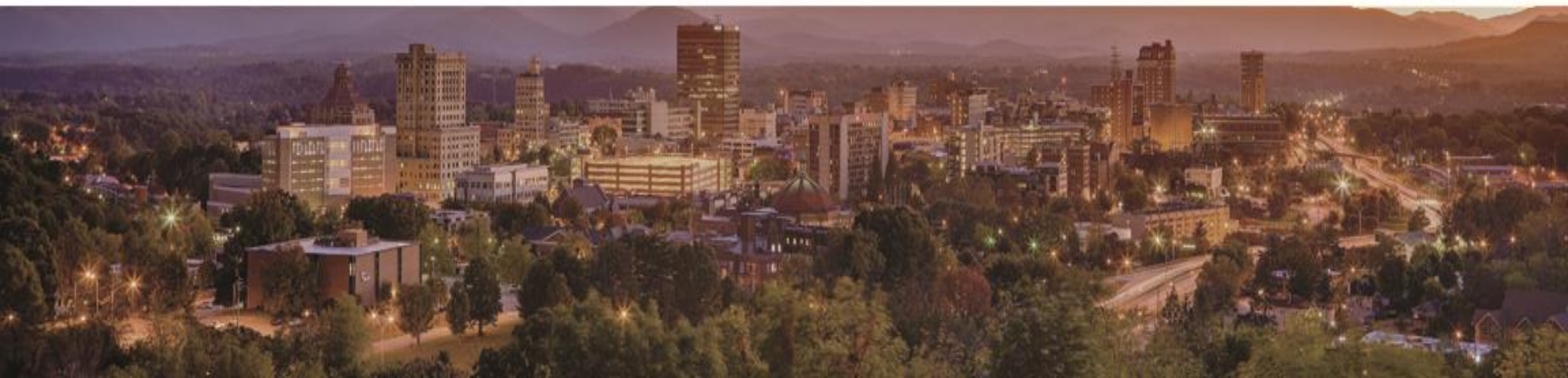




Hazardous Waste Generator Improvements Rule Overview

Department of Environmental Quality



Jenny Patterson
Special Projects Coordinator

Hazardous Waste Section
Division of Waste Management

Jenny.Patterson@ncdenr.gov
336-767-0031

**North Carolina Department of Environmental Quality
Division of Waste Management
Hazardous Waste Section - Compliance Branch**

REGIONAL INSPECTOR MAP

Brent Burch - Branch Head / 828.321.9585 / Brent.Burch@ncdenr.gov

Kelly Galantis - Branch Secretary / 919.707.8205 / Kelly.Galantis@ncdenr.gov



Western Unit

Sean Morris - Western Unit Supervisor / 704.464.1357 / Sean.Morris@ncdenr.gov

Richard Concepcion - Environmental Chemist / 828.578.8927 / Richard.Concepcion@ncdenr.gov

Eastern Unit

Eastern Unit Supervisor: Vacant

Autumn Romanski - Environmental Chemist / 919.280.1510 / Autumn.Romanski@ncdenr.gov

Jeff Menzel 828.419.5034 Jeff.Menzel@ncdenr.gov	Andrew Martin 919.270.3507 Andrew.Martin@ncdenr.gov
Ernie Lawrence 336.352.5742 Ernest.Lawrence@ncdenr.gov	Rose Pruitt 919.270.3476 Rose.Pruitt@ncdenr.gov
Heather Goldman 980.224.9858 Heather.Goldman@ncdenr.gov	

Jack Kitchen 919.219.0402 Jack.Kitchen@ncdenr.gov	Phil Orozco 919.212.2501 Phil.Orozco@ncdenr.gov	Don Burke 252.689.1159 Don.Burke@ncdenr.gov
Jenne Walker 919.707.8224 Jenne.Walker@ncdenr.gov	Bobby Nelms 910.602.3329 Robert.Nelms@ncdenr.gov	

Disclaimer

- The focus of this presentation is on the new and revised generator requirements established with the Hazardous Waste Generator Improvements Rule
- The requirements highlighted in this presentation are not all inclusive of the hazardous waste generator requirements
- The information provided is specific to North Carolina



Acronyms and Abbreviations Used

A few abbreviations will be used the presentations:

- HW = Hazardous Waste
- HWS = Hazardous Waste Section
- EPA = Environmental Protection Agency
- VSQG = Very Small Quantity Generator
- SQG = Small Quantity Generator
- LQG = Large Quantity Generator
- CAA = Central Accumulation Area
- SAA = Satellite Accumulation Area
- LEPC = Local Emergency Planning Committee
- HWGIR = Hazardous Waste Generator Improvement Rule



About this presentation



- Check marks in upper right corner of slide indicates which generator category must implement each new/revised provision

Hazardous Waste Generator Improvements Rule

Regulation Overview:

- Published in Federal Register on Nov. 28, 2016
- Effective on federal level on May 30, 2017
- Promulgated over 60 revisions and new provisions to the hazardous waste generator regulatory program in RCRA and consolidates rules into 40 CFR 262
- Will affect all hazardous waste generators in NC:
 - LQGs – 741
 - SQGs - 1707
 - CESQG – 4947



Hazardous Waste Generator Improvements Rule

Frequently Asked Questions:

When will this rule be effective in North Carolina?

March 1, 2018

What provisions will North Carolina adopt?



Hazardous Waste Generator Improvements Rule

Federal Rule and more information (FAQs, history):

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

State Rules incorporating the Federal Rules by Reference

15A NCAC 13A – Hazardous Waste Management Rules:

<http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2013%20-%20solid%20waste%20management/subchapter%20a/subchapter%20a%20rules.pdf>



Hazardous Waste Generator Improvements Rule

North Carolina State Rules and Guidance Documents
specific to HWGIR :

<https://deq.nc.gov/about/divisions/waste-management/hw/rules>

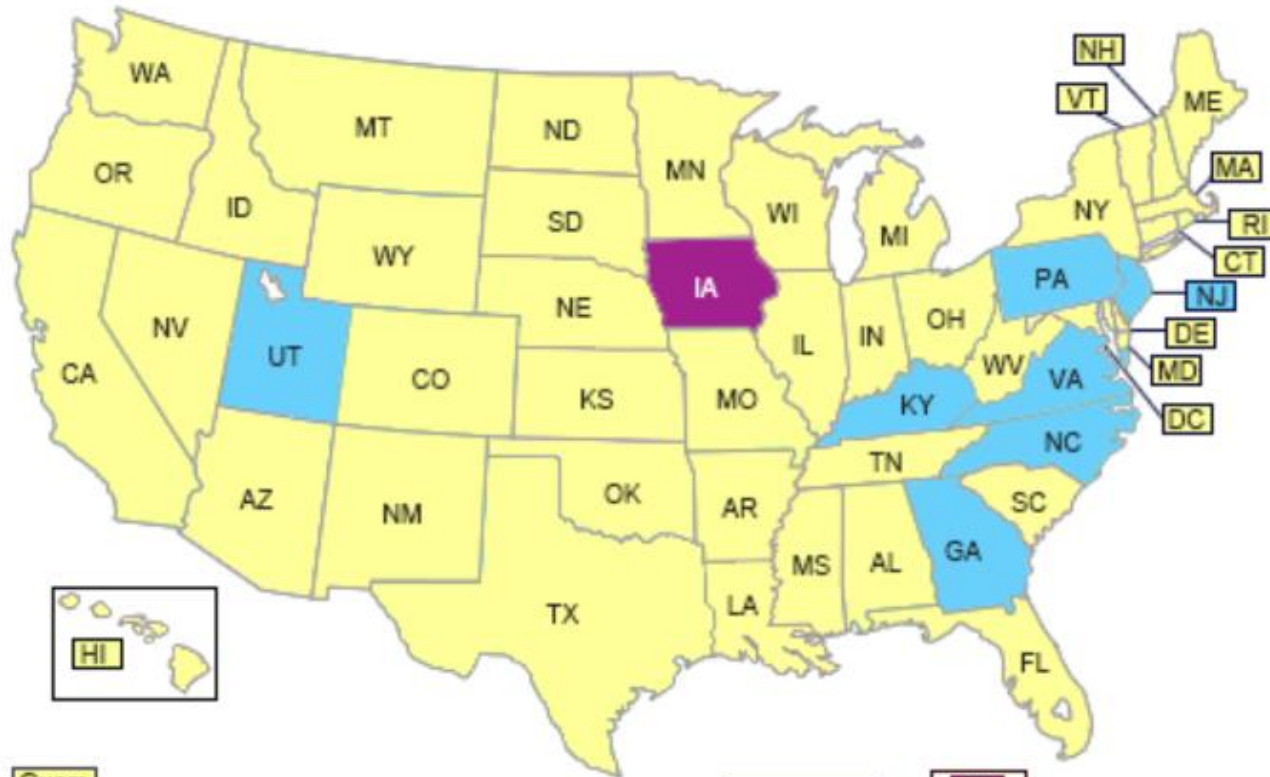
"Recently Finalized Rules and Proposed Hazardous Waste
Rules"

[https://deq.nc.gov/about/divisions/waste-
management/hw/technical-assistance-education-
guidance/documents](https://deq.nc.gov/about/divisions/waste-management/hw/technical-assistance-education-guidance/documents)

"Hazardous Waste Generator Improvements Rule"






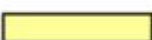
Where is the Hazardous Waste Generator Improvements Rule in Effect?



Guam
American Samoa
Northern Mariana Islands



Last updated on April 9, 2018

-  Authorized
-  Adopted
-  Administered by EPA Region
-  Neither Adopted nor Authorized



Major Impacts of Final Rule by Generator Category

New/Revised Provision	VSQG	SQG	LQG
Waste Determination	X	X	X
Generation Category Determination	X	X	X
LQG Consolidation of VSQG Wastes	X*		X*
Episodic Generation	X*	X*	
50-foot Waiver			X*
Marking & Labeling		X	X
Marking RCRA Waste Codes		X	X
SQG Re-notification		X	
Contingency Plan Quick Reference Guide			X
Emergency Arrangements		X	X
Closure Notification			X
Closure as Landfill if Cannot Clean Close			X
BR Reporting by Recyclers Who Do Not Store			X

*Optional Provisions



Reorganization of Generator Rules

Provision	Previous Citation	New Citation
Generator Category Determination	§ 261.5(c)–(e)	§ 262.13
CESQG (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
Episodic Events	None	Subpart L, § 262.230-234
Preparedness, Prevention, and Emergency Procedures for LQG	§ 265.30-56	Subpart M, § 262.250-265

As part of this reorganization, the Agency made conforming changes to citations that reference § 261.5 and § 262.34



New Definitions Added

40 CFR 260.10

- Central Accumulation Area (CAA):
 - Added for LQG and SQG. To replace terms like “generator accumulation areas,” “90-day areas,” and “180-day areas”
- Acute and Non-acute HW
- Large Quantity Generator
- Small Quantity Generator
- Very Small Quantity Generator
 - Formerly Conditionally Exempt Small Quantity Generator



Updates to Hazardous Waste Determination

40 CFR 262.11



- Clarifies HW determinations must be accurate
- Confirms generator's waste must be classified at its point of generation and before dilution, mixing, alteration
- Elaborates how to determine if a solid waste is either a listed and/or characteristic HW

Updates to Hazardous Waste Determination

40 CFR 262.11

- Revises language on how generators can make waste determination using generator knowledge
- LQG & SQG must document and maintain records of hazardous waste determinations for three years (or longer if under enforcement action)
- Identify/mark with all applicable HW codes
- Did not finalize provision requiring documentation of non-hazardous waste determinations as proposed



Generator Category Determination

40 CFR 262.13



- A generator must determine its generator category
- The category is based on the amount of hazardous waste that is generated in a calendar month
- A generator's category can change from month to month
- This provision also discusses how mixing of hazardous waste with non-hazardous waste impacts generator category

Generator Category Determination

Type of Generator	Quantity of non-acute HW generated in a calendar month	Quantity of acute HW generated in a calendar month	Quantity of residues from a clean-up of acute HW generated in a calendar month	Maximum Accumulation Time	Maximum On-Site Waste Accumulation Amount
Very Small Quantity Generator (VSQG)	≤ 100 kg (220 lbs)	≤ 1 kg (2.2 lbs)	≤ 100 kg (220 lbs)	No time limit	<ul style="list-style-type: none"> • 1,000 kg (2,200 lbs) non-acute HW at any time • ≤ 1 kg (2.2 lbs) acute HW at any time • ≤ 100 kg (220 lbs) acute HW from a clean-up at any time
Small Quantity Generator (SQG)	> 100 kg (220 lbs) but $< 1,000$ kg (2,200 lbs)	≤ 1 kg (2.2 lbs)	≤ 100 kg (220 lbs)	180 days; 270 days if TSDf is more than 200 miles from the facility	<ul style="list-style-type: none"> • 6,000 kg (13,200 lbs) non-acute HW at any time • ≤ 1 kg (2.2 lbs) acute HW at any time • ≤ 100 kg (220 lbs) acute HW from a clean-up at any time
Large Quantity Generator (LQG)	$\geq 1,000$ kg (2,200 lbs)	> 1 kg (2.2 lbs)	> 100 kg (220 lbs)	90 days	No quantity limit

Notification for SQG and LQG

40 CFR 262.18



- Notification requirements moved from 262.12 to 262.18
- Requires re-notification (myRCRAid) for SQGs and LQGs;
 - SQGs every four years starting in 2021
 - LQGs by March 1 of each even numbered year (can use biennial report to notify)
- Use myRCRAid to notify, re-notify, or make changes electronically
 - No longer using hardcopy EPA form 8700-12



myRCRAid

- Now facilities will enter facility information directly into the database instead of submitting a hard copy form for entry
- Link to a brief summary about registering for myRCRAid and further information on a tutorial for myRCRAid:

<https://files.nc.gov/ncdeq/Waste%20Management/DWM/HW/Electronic%20Filing%20of%20EPA%20Notifications.pdf>

Questions about myRCRAid?

Nivia Webb

Phone: 919-707-8229

Email: Nivia.Webb@ncdenr.gov



Marking and Labeling



- Requires SQGs and LQGs to label HW containers (satellite and central accumulation) and tanks with the following:
 - “Hazardous Waste”; and
 - Indication of the hazards of the contents
 - See next slides for examples
 - Applicable hazardous waste code(s) (required prior to shipping only)

Marking and Labeling



Indication of the hazards of the contents

Examples include, but are not limited to:

- Applicable HW Characteristics
 - e.g. "Ignitable", "Corrosive", "Reactive", "Toxic"
- Hazard Communication consistent with DOT requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding)
- Hazard statement or pictogram consistent with OSHA Hazard Communication Standard 29 CFR 1910.1200
- Chemical hazard label consistent with the National Fire Protection Association code 704



Examples of Labels that indicate the “Hazards”

The applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic):



Examples of Labels that indicate the “Hazards”

Hazard communication consistent with DOT (49 CFR part 172 Subpart E – Labeling or Subpart F – Placarding)



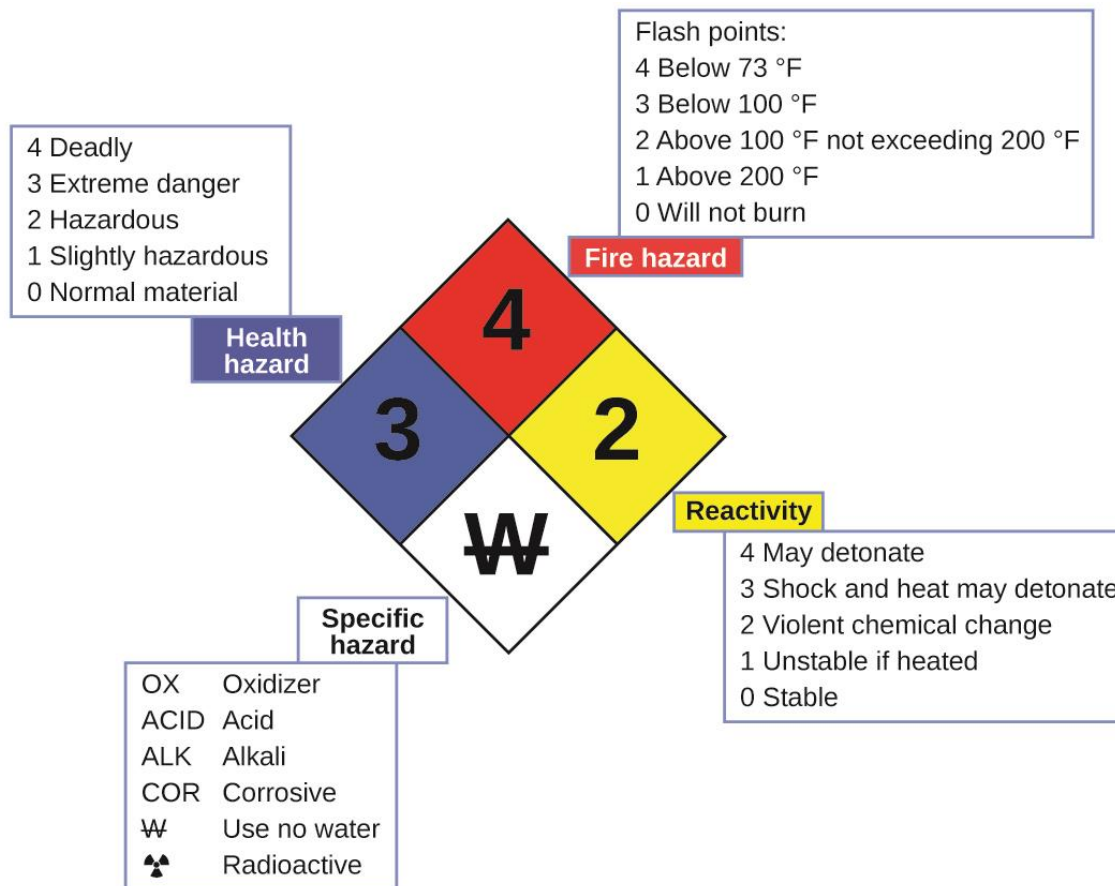
Examples of Labels that indicate the “Hazards”:

Hazard statement or pictogram consistent with OSHA (29 CFR 1910.1200)



Examples of Labels that indicate the “Hazards”

Chemical hazard label consistent with the National Fire Protection Association code 704



Prior to Transporting, must meet the 262.32 Marking Requirements

Must have specific statement

Generator's Name, Address, and EPA ID Number

Manifest Tracking Number

EPA HW Numbers

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, UN1760, III (Sulfuric Acid, Hydrochloric Acid)

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

HANDLE WITH CARE!

STYLE WM8

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



Marking and Labeling Clarifications

- Labeling should occur at the initial point of generation
- For containers that have small containers inside (e.g., tubes, vials, etc.), generators can mark the outer/secondary container or attach a tag with the required information
- For containers that already have appropriate marking and labeling (e.g., a Commercial Chemical Product in its original container with an intact label), the existing marking and labeling is sufficient, provided it indicates the hazards of the chemical and the words “Hazardous Waste” are added



Marking and Labeling Clarifications

- For drip pads and containment buildings, the generator can keep this information in logs or records near the accumulation unit
- The labels are not required to include the identity of the contents of the container (as proposed)

Satellite Accumulation Areas

40 CFR 262.15



- Rules previously located at 262.34(c)
- Rules apply to SQG and LQG
- Provides maximum weight (1 kg) in addition to volume (1 quart) for acute hazardous waste limit
- Clarifies that “three days” means three consecutive calendar days for when waste must be moved to CAA or permitted TSDF
- Makes marking and labeling requirements consistent with central accumulation areas
- Preparedness, prevention, and emergency requirements apply to satellite accumulation areas (for example):
 - Emergency Arrangements must include these areas (SQG/LQG)
 - Contingency plan must include these areas (LQG)



Satellite Accumulation Areas

40 CFR 262.15



Additions to Satellite Accumulation Container Requirements:

- Must meet requirements applicable to incompatible waste:
 - Incompatibles must not be placed in the same container
 - Hazardous waste must not be placed in an unwashed container that previously held an incompatible
 - A container holding a HW that is incompatible with any waste or other materials accumulated nearby in other containers must be separated from the other materials or protected from them by any practical means



Satellite Accumulation Areas

40 CFR 262.15



Additions to Satellite Accumulation Container Requirements:

- Must be closed at all times during accumulation, except when adding, removing, or consolidating waste, or when *temporary* venting of a container is necessary
 - For the proper operation of equipment, or
 - To prevent dangerous situations, such as build-up of extreme pressure

Emergency Preparedness & Prevention Arrangements



- For LQG – 262 Subpart M
 - For SQG – 262.16(b)(8)
- } Previously in 265.37
- Updated preparedness, prevention, planning and emergency procedures provisions for SQGs and LQGs;
 - New rule still states generator must attempt to make arrangements with local (instead of the proposed language of “must make”), but they must document arrangements
 - May make arrangements with the Local Emergency Planning Committee if it is determined the appropriate organization with which to make arrangements, but not required



Emergency Preparedness & Prevention

- Emergency Arrangements (for SQG/LQG) and Contingency Plans (LQG) apply to areas where waste is generated, satellite accumulation areas and central accumulation areas
- A facility possessing a 24-hour response capability can seek a waiver from making arrangements with emergency authorities
 - Waiver issued by “authority having jurisdiction” over the fire code within the facility’s state or locality



Emergency Preparedness & Prevention LQG

Waiver to 50-foot Requirement: 262.17(a)(1)(vi)(A)

- Allows a facility to request a variance for the storage of ignitable and reactive waste to be stored less than 50 feet from the property line
- Generators may seek a waiver from the “authority having jurisdiction over the fire code.” The authority may approve a waiver if it thinks the precautions taken by the facility make such accumulation appropriate and safe.

Special Conditions for Accumulation of Ignitable & Reactive Waste



- LQGs must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste
- This waste must be separated and protected from sources of ignition or reaction including (but not limited to)
 - Open Flames
 - Smoking
 - Cutting and Welding
 - Hot Surfaces
 - Frictional Heat
 - Sparks (Static, Electrical, or Mechanical),
 - Spontaneous Ignition (e.g., from heat-producing chemical reaction)
 - Radiant Heat



Special Conditions for Accumulation of Ignitable & Reactive Waste



- Must confine smoking and open flame to specially designated locations
- "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.



Emergency Preparedness & Prevention Contingency Plan



- Requirement to list home addresses has been removed
- In situations where the LQG has an emergency coordinator continuously on duty because it operates 24 hours per day, every day of the year, the plan may list the staffed position (e.g., operations manager, shift coordinator, shift operations supervisor) as well as an emergency telephone number that can be guaranteed to be answered at all times.
- Contingency Plan Quick Reference Guide required to be submitted when new facility or updated plan is submitted to local emergency authorities (specifics on next slides)



Contingency Plan Quick Reference Guide

Quick reference guide must include the following:

- Types/names of hazardous wastes (HW) in layman's terms & associated hazard of each HW present at any one time;
 - Example: toxic paint wastes, spent ignitable solvent, corrosive acid
- Estimated maximum amount of each HW that may be present at any one time;

Contingency Plan – Quick Reference Guide

- Identification of any HW where exposure would require unique or special treatment by medical or hospital staff
- Map of facility showing where HWs are generated, accumulated & treated and routes for accessing these wastes
- Street map of facility in relation to surrounding businesses, schools, residential areas to understand how best to get to facility and also evacuate citizens and workers



Contingency Plan – Quick Reference Guide

- Locations of water supply (e.g., fire hydrant and its flow rate)
- The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and
- Name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s)

Must update quick reference guide whenever contingency plan must be updated



Revised Closure Provisions for LQG



Revised closure provisions for LQGs: 262.17(a)(8)

- Requires LQGs accumulating hazardous wastes in containers to close as landfill if unable to clean close
- Requires LQGs to notify when closing its facility
 - 30 days prior to closing facility
 - 90 days after closing facility and complied with closure performance standards
- Provides option of LQG closing waste accumulation unit by:
 - Notifying they have met closure performance standards; or
 - Place notice in operating record within 30 days after closing waste accumulation unit and addressing closure when facility closes
- Clarifies that closure does not apply to satellite accumulation areas



LQG Consolidation of VSQG HW

262.14(a)(5)(viii) and 262.17(f)



Allows a LQG to consolidate HW from a VSQG as long as both entities are under the control of the same person provided the LQG:

- Notifies (using 8700-12 form) of this activity,
- Dates the waste when received,
- Manages waste received by LQG rules,
- Maintains paperwork for each shipment received, and
- Reports waste on biennial report



LQG Consolidation of VSQG HW

262.14(a)(5)(viii) and 262.17(f)



Allows a LQG to consolidate HW from a VSQG as long as both entities are under the control of the same person provided the VSQG labels containers with specific wording:

- “Hazardous Waste”; and
- Indication of the hazards of the contents
 - Applicable HW Characteristics, or
 - Hazard Communication consistent with DOT requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding), or
 - Hazard statement or pictogram consistent with OSHA Hazard Communication Standard 29 CFR 1910.1200
 - Chemical hazard label consistent with the National Fire Protection Association code 704



Episodic Generation

262 Subpart L



Allows SQG and VSQGs to maintain their regulatory status if temporarily generating more HW due to an episodic event provided that:

- Planned/unplanned episodic event is limited to one per calendar year
 - Or one additional event if petition is approved by HWS
- Generator must notify using EPA 8700-12 form at least 30 calendar days prior to initiating a planned episodic event or within 72 hours after an unplanned episodic event
 - Generator must obtain an EPA ID number (VSQGs)
- Episodic event must be initiated and completed within 60 days



Episodic Generation

262 Subpart L

SQGs need to comply with existing SQG regulations and maintain records associated with the episodic event

- Label episodic waste containers with “episodic hazardous waste,” an indication of the hazards, and the date the event began
- Maintain records associated with the episodic event



Episodic Generation

262 Subpart L

Requirements for VSQGs:

- Obtain a RCRA identification number
- Use a hazardous waste manifest and transporter to send episodic waste to a TSDf or recycler
- Manage the episodic hazardous waste in a manner that minimizes the possibility of an accident or release
- Label episodic waste containers with “episodic hazardous waste,” an indication of the hazards, and the date the event began
- Identify an emergency coordinator
- Maintain records associated with the episodic event



Other Changes

- Deleted obsolete regulations that refer to the Performance Track/Project XL programs;
- Added a provision that placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.
 - In NC, disposal of hazardous waste and liquids in the landfill are already prohibited
- Biennial Report – removed instructions in rules and referred to the biennial report form for instructions (EPA Form 8700–13 A/B)





Questions?

