

# Hazardous Waste Generator Improvement Rule

FOR:

INDIANA CHAMBER ENVIRONMENTAL  
CONFERENCE

---



PREPARED BY:

**BCA Environmental Consultants**

LAST UPDATED: SEPTEMBER 20, 2019

1

## Table of Contents

---

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• <b>RCRA Overview</b><ul style="list-style-type: none"><li>• History of Rule</li><li>• Generator Universe</li><li>• Goals of the Final Rule – per the EPA</li></ul></li></ul> | <ul style="list-style-type: none"><li>• <b>Rule Provisions</b><ul style="list-style-type: none"><li>• Reorganization</li><li>• Waste Determinations</li><li>• Waste Counting</li><li>• Consolidation of waste at LQG</li><li>• Episodic Event</li><li>• Marking and Labeling</li><li>• Satellite Accumulation Areas</li><li>• SQG Re-notification</li><li>• Emergency Planning and Preparedness</li><li>• 50 – foot waiver</li><li>• Reporting and Recordkeeping</li><li>• Closure</li></ul></li></ul> |
|--|--|

2

## Rule Process and Schedule

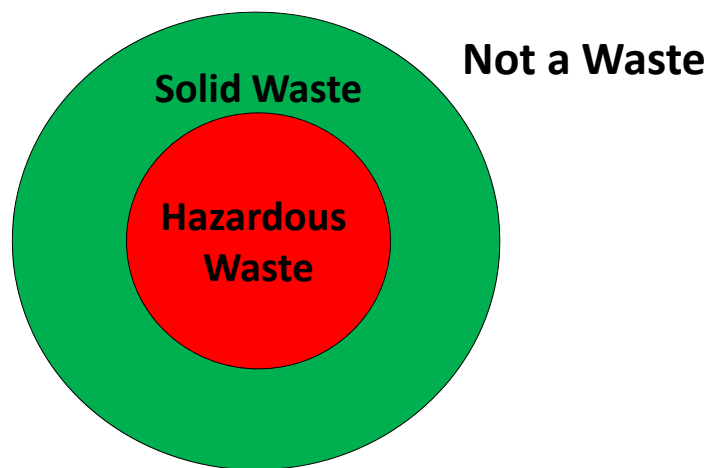
---

- Rule Signed on October 28, 2016
- Publication in Federal Register – November 28, 2016
- Effective Date – May 30, 2017
- Authorized states go through adoptions and authorization process for more stringent
  - July 1, 2018 or July 1, 2019 if state law change is needed
  - Indiana requires state law change – expected Q1 2019
- Authorized states may choose to pick up less stringent
  - Expecting Indiana to adopt HWGIR in entirety

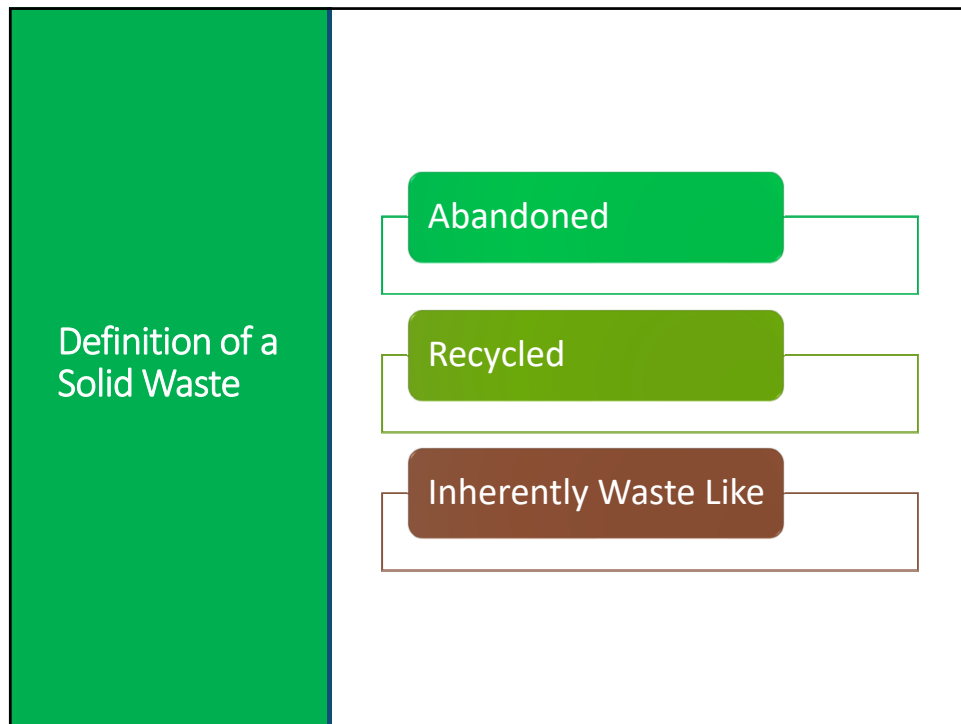
3

## The Universe of Waste

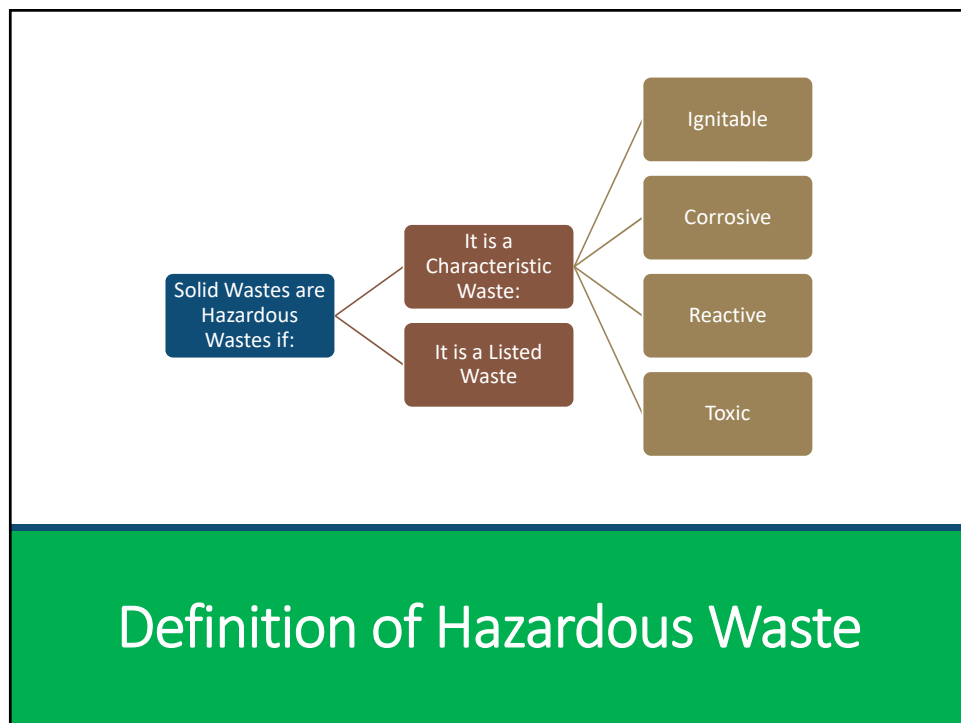
---



4



5



6

## Types of Generators

Generator Status	Thresholds (per month)	Total HW Generated (tons) *	Percent of Total Waste Generated
VSQGs	<220 lbs	46,000 – 148,000	<1%
SQGs	220 – 2,200 lbs	66,000 – 141,000	<1%
LQGs	<2,200 lbs	35.2 Million	99%

7


## Goals of the Rule

Over 60 changes were made to the HW rule that:

1. Reorganize the regulations to make them more user friendly
2. Provide greater flexibility – cost effective management
  1. Episodic events
  2. VSQG → LQG consolidation
3. Filling in gaps to strengthen environmental protection
4. Clarify certain components and address ambiguities


8

Stringency of Final Rule



**More stringent**

- SQG re-notification
- Identifying hazards and labeling
- Notification of closure
- Biennial reporting for whole year, not just months was an LQG
- Biennial reporting for recyclers who don't store prior to recycling
- Quick reference guide for contingency plans



**Less Stringent**

- VSQG consolidation
- Episodic generation
- Waiver from 50-foot rule

9

## Reorganization

Provision	Existing Citation	Final Citation
Generator Category Determination	261.5(c)-(e)	262.13
VSQG Provisions	261.5(a), (b), (f)-(g)	262.14
Satellite Accumulation	262.43(c)	262.15
SQG Provisions	262.34(d)-(f)	262.16
LQG Provisions	262.34(a), (b), (g)-(i), (m)	262.17

10

## Hazardous Waste Determination 262.11(a)



The hazardous waste determination for each solid waste must be made at the point of waste generation...



RCRA Statute is clear – the term “hazardous waste generation” means the act or process of producing hazardous waste.



Why at the point of generation?

To ensure:

- Proper waste identification
- Proper handling and management from “cradle to grave”

Strengthening Environmental Protection

11

## Hazardous Waste Determination 262.11(a)

The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing or other alteration of the waste occurs...

- EPA added this language to state their *existing interpretation* that you must characterize your waste before dilution, mixing or alteration
- Alteration of waste: May change waste properties and subsequent handling
  - Example: allow volatile organics volatilize from an uncovered container

Strengthening Environmental Protection

12

## Hazardous Waste Determination 262.11(a)

The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change

- Generators must understand chemistry of their wastes
- A SW determined to be non-hazardous at the POG may change while being managed on site through exposure to environment
- Note: the opposite may be true

**Does this mean you need to monitor your waste 24/7?**

Strengthening Environmental Protection

13

## Hazardous Waste Counting

- A hazardous waste generator has always had to count their hazardous waste to determine their category
- The regulations did not present requirements about determining generator categories in a clear and succinct way
- New § 262.13 clarifies the process for a generator to determine its generator category each calendar month
- This provision also discusses how mixing of hazardous waste with non-hazardous waste impacts generator category.

Clarifying Regulations

14

## Mixing – What Changed?

- Reorganization distinguished VSQGs mixing requirements from those for SQGs and LQGs
- Clarified VSQGs mixing solid waste with hazardous wastes and generating characteristic waste must count that waste towards their generator category for that month
- Made clear that SQGs and LQGs mixing solid wastes with hazardous wastes are subject to certain restrictions and requirements.



Clarifying Regulations

15

## VSQG Mixing

Clarifies that a VSQG mixing hazardous waste with solid waste can remain subject to VSQG requirements even though the mixture may exceed the VSQG quantity limits as long as the mixture does not exhibit one or more of the characteristics of a hazardous waste.



If the resultant mixture does exhibit a hazardous waste characteristic, the mixture is a newly generated hazardous waste.

Clarifying Regulations

16



## SQGs and LQGs Mixing

- Mixtures of hazardous waste and solid waste at SQGs and LQGs are subject to:
  - The mixture rule in §§ 261.3(a)(2)(iv), (b)(2) and (3), and (g)(2)(i);
  - The prohibition of dilution rule at § 268.3(a);
  - The land disposal restriction requirements of § 268.40 if a characteristic hazardous waste is mixed with a solid waste so that it no longer exhibits the hazardous characteristic; and
  - The hazardous waste determination requirement at § 262.11

Clarifying Regulations

17

## Mixing vs Dilution

Generators can't dilute their hazardous wastes unless it provides a useful and effective contribution (i.e., possess a unique property to remove the hazardous characteristic from the hazardous waste instead of merely diluting it).



18

## Mixing: Why the Changes?

- Changes are designed to clarify the language that was found at § 261.5(h) and (i) which addressed the mixing of hazardous waste and nonhazardous waste by a VSQG
- The language specifically addressed how the regulations apply when VSQG hazardous waste is mixed with nonhazardous solid waste and the resulting combination exceeds the VSQG quantity limits.
- The previous regulations also did not specifically discuss SQGs and LQGs mixing solid wastes with hazardous wastes in the generator provisions.

19

## Waste Consolidation

What was the problem with the old rule?

- Some companies would like to be able to consolidate wastes from their own VSQG sites for more efficient shipping and hazardous waste management
  - Reduces liability for company as a whole by ensuring proper management of hazardous waste
  - Sending to a RCRA-designated facility is the most environmentally sound option
  - Previously an LQG needed a RCRA permit to receive VSQG wastes

Enhancing Generator Flexibility

20

## VSQG Consolidation at LQGs



### New Consolidation Provision

- Consolidate waste at an LQG under the control of the same person:
  - Control – means the power to direct policies at the facility
- VSQG standards
  - Marks and labels waste containers with “Hazardous Waste” and the hazards
- No hazardous waste manifest is required and hazardous waste transporters do not have to be used

Enhancing Generator Flexibility

21

## VSQG Consolidation at LQGs

### LQG Standards

- Notifies state on Site ID Form that it is participating in this activity and identifies which VSQGs are participating
- Recordkeeping for each shipment – normal business records
- Adds accumulation start date to VSQG HW labels when arrives at LQG
- Manages consolidated waste as LQG hazardous waste
- Reports in Biennial Report – there will be a different source code (G51) for the VSQG consolidated waste to distinguish from the LQG’s own generated waste

*EPA did not extend this provision to allow SQGs to consolidate VSQG HW, but an SQG can participate if they notify and act as an LQG (meeting all LQG standards including getting the VSQG HW off-site in 90 days)*

Enhancing Generator Flexibility

22

## VSQG Consolidation at LQGs

### FAQs about Consolidation Provision

- When does the 90-day clock start for VSQG consolidated waste?
  - When the VSQG waste gets to the LQG, the 90-day clock to accumulate the waste starts
- Is there any accumulation limit for how much waste can be consolidated at an LQG?
  - No, there is no overall accumulation limit but the waste must be sent off-site to a RCRA TSDf or recycler within 90 days
- Does the LQG add the VSQG waste to its annual generation amount?
  - The LQG would report both its own generated waste and the waste consolidated from its VSQGs on the Biennial Report. However, there is a different source code (G51) for the VSQG waste so they can distinguish between their own HW and the consolidated waste

Enhancing Generator Flexibility

23

## VSQG Consolidation at LQGs

### FAQs about Consolidation Provision

- When transporting the waste from the VSQG to the LQG, what requirements must be met?
  - There are no specific requirements other than applicable DOT requirements
- Is there a quantity limit for shipments from the VSQG
  - No, but the VSQG must stay within its own accumulation limit
- Can VSQG and LQG be in different states?
  - Yes, if both states have adopted the consolidation provision. If the HW is transported through other states, the generator should check with the transit state to see if they can pass through

Enhancing Generator Flexibility

24

# VSQG Consolidation at LQGs

## FAQs about Consolidation Provision

- What marking and labeling should be on the containers?
  - At the VSQG, the words “Hazardous Waste” and the hazards
  - At the LQG, the words “Hazardous Waste”, the hazards and the accumulation start date
- Can the LQG consolidate the VSQG HW within the same container with their own LQG HW
  - Yes, if the waste is compatible. The LQG would need to use the earlier accumulation start date on the combined HW to determine how long the combined HW can remain on-site.

Enhancing Generator Flexibility

25

# VSQG Consolidation at LQGs

## FAQs about Consolidation Provision

- Does the LQG have to retain shipping records
  - Yes, the records would have to be kept for three years and must include:
    - The name, address, and contact info for the VSQG, and
    - A description of the waste received, including the quantity and date the VSQG waste was received
    - *This does not need to be on a manifest.*

Enhancing Generator Flexibility

26



## Episodic Event

Current RCRA rule lacks flexibility to address “episodic” events

- Planned event (i.e. tank cleanouts)
- Unplanned events (i.e. production upsets, spills, acts of nature)

Currently, generators must comply with LQG/SQG regulations for when not regular generators of higher levels of hazardous waste

Enhancing Generator Flexibility

27

## Episodic Event

Final Provision allows generators to maintain existing category provided they comply with streamlined set of requirements

- Applies to VSQG and SQG
- One event per calendar year with ability to petition for 2<sup>nd</sup>
  - If first event is planned, the 2<sup>nd</sup> must be unplanned and vice versa
- Notify EPA or state at least 30 days prior to initiating a planned episodic event
- Notify EPA or state within 72 hours after an unplanned event

Enhancing Generator Flexibility

28

# Episodic Event



## Duration of an Episodic Event

- First day of the episodic event is the first day of waste generation.
- Episodic event can last 60 days
- All hazardous waste must be shipped off site by the end of 60 days
- If the generator does not know if the event is going to be episodic, EPA recommends notification.
- May complete multiple projects during the time limit

Enhancing Generator Flexibility

29

# Episodic Event

## Streamlined requirements for VSQGs

- Obtain RCRA ID Number
- Use hazardous waste manifest and transporter to designated facility
- Manage in a manner that minimizes possibility of an accident or release
- Label episodic waste containers
  - “Episodic Hazardous Waste”
  - Indication of hazards of the contents
  - Date the episodic event began
- Identify an emergency coordinator
- Maintain records associated with episodic event

Enhancing Generator Flexibility

30

## Episodic Event

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

Enhancing Generator Flexibility

31

## Episodic Event

### Recordkeeping:

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

### Elements:

- Beginning and end date of episodic event (notification)
- Description of episodic event (notification)
- Types of hazardous wastes generated
- Quantities of hazardous waste generated (manifest)
- How the wastes were managed at TSDF or recycler (manifest)
- Name of hazardous waste transporters (manifest)
- Approval letter if approved for 2<sup>nd</sup> event

Enhancing Generator Flexibility

32



## Episodic Event

### Petition for 2<sup>nd</sup> event

- Made in writing
- Include reason for the event, estimated amount, how the waste will be managed, estimated length of episodic event and information about previous event in the same calendar year

### Planned event

- Petition submitted to EPA or state 30 or more days prior to event

### Unplanned event

- Notify EPA or state within 72 hours by phone or email, followed by submittal of form 8700-12 and indication this is second event



Enhancing Generator Flexibility

33

## Marking and Labeling

Current rule do not require generators to identify and indicate the hazardous of the wastes accumulated

- Resulted in failure to communicate risks
- Can impact workers, handlers, emergency responders and visitors

Strengthening Environmental Protection

34

## Marking and Labeling

Strengthening  
Environmental  
Protection

### Areas affected

- Satellite Accumulation Areas
- Central Accumulation Areas
- Transfer facilities consolidating hazardous wastes
- Generator container and tanks storage areas at TSDF

35

## Marking and Labeling

Strengthening  
Environmental  
Protection

### Final Rule

- Containers and tanks must indicate the hazards of the contents
- May use a number of methods
  - DOT HazComm
  - OSHA hazard statement or pictogram
  - NFPA chemical hazards label
  - RCRA characteristic
  - Note: the labels are not required to include the identify of the contents (as proposed)

36



## Marking and Labeling

EXAMPLES

Strengthening Environmental Protection

37

## Marking and Labeling

### Some clarifications:

- Labeling should occur at the initial point of generation
- Containers with small containers can mark the outer container or attach a tag
- Wastes in a container already marked (e.g. a commercial products in its original container), must only mark "Hazardous Waste"

Strengthening Environmental Protection

38

## Satellite Accumulation Areas

### Some clarifications:

- Explicitly require incompatible wastes not be mixed
- Allow containers to be open temporarily under limited circumstances
- Provide maximum weight and volume for acute hazardous waste
- Explicitly clarified “three days” is three consecutive calendar days (not operating days)
- Rescinded memo allowing reactive hazardous waste to be stored away from point of generation
  - If that hazardous, must go directly to CAA
- Make marking and labeling consistent with CAA

Strengthening Environmental Protection, Enhancing Generator Flexibility, Clarifying Regulations

39

## SQG Re-notification

### Final Rule

- Requires SQGs to re-notify every 4 years unless states have more frequent re-notification requirements
  - Annual already for Indiana
- Electronic reporting an option
- Compliance date is delayed until 2021 to give some states time to update reporting platforms

Strengthening Environmental Protection

40

## Emergency Preparedness and Planning

Strengthening  
Environmental  
Protection

### Coordination with Emergency Responders

#### Previous regulation

- Required generator to attempt to make arrangements with local emergency responders
- No requirement to document arrangements (only that local emergency responded declined request)

#### Final Rule

- Generators must document they have attempted to make arrangements
- No specific form or type of documentation

41

## Emergency Preparedness and Planning

Strengthening  
Environmental  
Protection

### Contingency Plan Quick Reference Guide

#### Problem

- Contingency Plans are required to be submitted and are lengthy
- Emergency responders want quick access to key information

#### Final Rule

- Requires new LQGs to submit contingency plans with a Quick Reference Guide
- Requires existing LQGs to include Quick Reference Guide when they otherwise update their contingency plan

42

## Emergency Preparedness and Planning

Strengthening  
Environmental  
Protection

### Contents of Contingency Plan Quick Reference Guide

- Type/names of hazardous waste and associated hazards
- Estimated maximum amounts of hazardous wastes
- Hazardous wastes requiring unique treatment
- Map showing where hazardous wastes are generated, accumulated or treated
- Map of facility and surroundings to identify routs of access and evacuation
- Location of water supply
- Identification of on-site notification systems
- Name of emergency coordinator(s) or listed staffed positions(s) and 24/7 emergency telephone number(s)

43

## Waiver to 50-Foot Requirement

### Problem

- Generator regulations require that containers with ignitable or reactive wastes be located at least 50 feet from the facility's property line

### Final Rule

- Allows LQGs to approach the fire marshal to apply for a waiver from the requirement if the fire marshal believes the precautions are appropriate and safe

Enhancing Generator Flexibility

44

# Reporting

## Final Rule: Biennial Report (BR) Clarifications Consistent with Existing BR Guidance

- Regulations will not list specific data elements to be reported, but instead refer generators directly to the form instructions
- LQGs must report all hazardous waste generated and managed on-site in reporting year; LQGs that generate and manage hazardous wastes off-site must follow existing BR guidance
- LQGs must report hazardous wastes generated throughout the calendar year, even for months when they are an SQG (§ 262.41)

## Closing Regulatory Gap

- Recycling facilities that do not have a RCRA storage permit must now report hazardous wastes being recycled

Clarifying Regulations, Strengthening Environmental Protection

45

# Recordkeeping

## Recordkeeping for tanks

- Batch process: tank has been emptied every 90 or 180 days
- Continuous flow process: document estimated volumes of hazardous waste entering tank daily and exiting the tank within 90 or 180 days of first entering

Clarifying Regulations, Strengthening Environmental Protection

46

## Reporting and Recordkeeping

Clarifying  
Regulations,  
Strengthening  
Environmental  
Protection

### EPA is not finalizing on the following that it proposed or took comment on

- Maintaining documentation of waste determinations until the facility closes
- Notifying the state or EPA of closure of a waste accumulation unit at a facility
- Requiring documentation of container weekly inspections

47

## Closure

### Final Rule

- Require closure as a landfill if LQGs accumulating hazardous wastes in containers fail to clean close
- Notification – Closure of waste accumulation area
  - Require LQGs to place notice in their operating record within 30 days after closure identifying location of unit within facility; or meet closure performance standards and notify EPA.
- Notification – Closure of facility
  - Notify EPA or authorized state no later than 30 days prior to closing facility, and
  - Notify EPA or authorized state within 90 days after closing facility that it has complied with closure performance standards or notify if it can't clean close
  - LQG can request extension but must notify EPA or authorized state within 75 days after closing facility

Strengthening Environmental Protection

48



### Major Changes by Generator Category

New Provision	VSQG	SQG	LQG
Reorganization	X	X	X
Consolidation	X		X
Episodic	X	X	
50-foot waiver			X
Marking and Labeling		X	X
Marking RCRA Waste Codes		X	X
SQG Re-notification		X	
Quick Reference Guide			X
Closure			X
Closure as Landfill if can't clean close			X
BR reporting by recyclers who don't store		X	X

49

## EPA Points of Contact

Kathy Lett

- 703-605-0761
- [Lett.Kathy@epa.gov](mailto:Lett.Kathy@epa.gov)

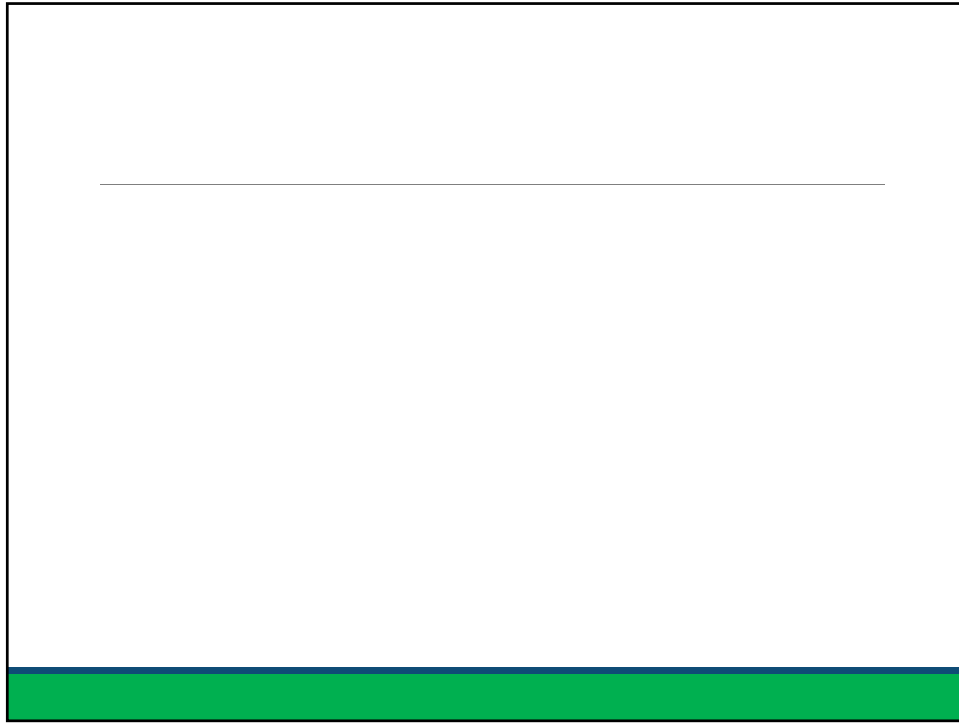
Mary Beth Sheridan

- 703-308-4941
- [Sheridan.MaryBeth@epa.gov](mailto:Sheridan.MaryBeth@epa.gov)

Brian Knieser

- 703-347-8769
- [Knieser.Brian@epa.gov](mailto:Knieser.Brian@epa.gov)

50



51