

29TH ANNUAL BUSINESS & INDUSTRY'S

Sustainability & Environmental, Health and Safety



S Y M P O S I U M

Workshop X

**New to EHS /101 Basics ... Waste
Management Regulations Most-Likely
to Affect Your Daily Job**

**Tuesday, March 24, 2020
3:30 p.m. to 4:45 p.m.**

Biographical Information

Rajib Sinha, P.E., Senior Engineer/Project Manager
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Mr. Sinha is a Chemical Engineer and Project Manager with over 30 years of experience in Environmental Consulting and Engineering. Mr. Sinha has provided a wide array of services to industry for compliance with various laws. For eight years, Mr. Sinha led a team of engineers, geologists, scientists, and administrative staff that provided environmental compliance, safety, and Industrial Hygiene services to commercial facilities and governmental clients. This includes projects conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Resource Conservation and Recovery Act (RCRA); Superfund Amendments and Reauthorization Act (SARA); Bureau of Underground Storage Tank Regulations (BUSTR). Mr. Sinha has designed and implemented several systems for treating contaminated groundwater and industrial wastewater and assisted several clients in complying with provisions of the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act (CWA). He has coordinated his work activity with various disciplines and clients.

Mr. Sinha has also served as the Project Leader for research projects at the U.S. Environmental Protection Agency (USEPA) Test & Evaluation (T&E) Facility in Cincinnati, OH. He directs research related to providing safe drinking water with a particular emphasis on systems serving small communities without access to public drinking water systems. Other current projects include development of innovative retrofit devices for stormwater management and watershed management research. Mr. Sinha also develops and manages third-party commercial projects at the T&E Facility.

Mr. Sinha has made numerous presentations in conferences as well as published papers in peer-reviewed journals.

Mr. Sinha holds a Bachelor of Technology in Chemical Engineering (Jadavpur University), Master of Science in Chemical Engineering (University of Southern California), and a Master of Business Administration (University of Cincinnati).

Kris Singleton, Corporate Health, Environmental, and Safety Engineer
SunCoke Energy, Inc., 3353 Yankee Rd., Middletown, OH
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Ms. Singleton has nearly 30 years of experience in regulatory compliance including environmental, safety and quality management. Ms. Singleton started her career as a project engineer with an environmental and engineering consulting firm in southwest Ohio, gaining experience with air and water permitting as well as environmental compliance plan preparation (SPCC, storm water, hazardous waste management, etc.). Ms. Singleton then moved into the chemical manufacturing industry, progressing from Environmental Engineer to Manager of Quality Assurance and Regulatory Compliance working for several chemical manufacturing companies in West Virginia and Ohio. Experiences included wastewater treatment unit operations, air emissions reporting, leak detection and repair programs, Title V compliance, Continuous Emissions Monitoring Systems (CEMS), and environmental and quality management systems (ISO 14001 & 9001). In 2008, Ms. Singleton joined Dayton Power and Light as Environmental, Health and Safety Engineer responsible for environmental and safety compliance at several coal and natural gas electric generation stations.

Ms. Singleton joined SunCoke Energy in 2013 as Environmental Manager for their Middletown, Ohio facility which manufactures metallurgical coke for the steel industry and also produces power using heat recovery steam generators. Currently, Ms. Singleton serves as SunCoke's Corporate Environmental Engineer where she supports environmental operations at SunCoke's manufacturing facilities in the U.S. and helps lead corporate environmental initiatives.

Ms. Singleton holds a Bachelor of Science degree in Chemical Engineering from the University of Dayton in Dayton, Ohio.

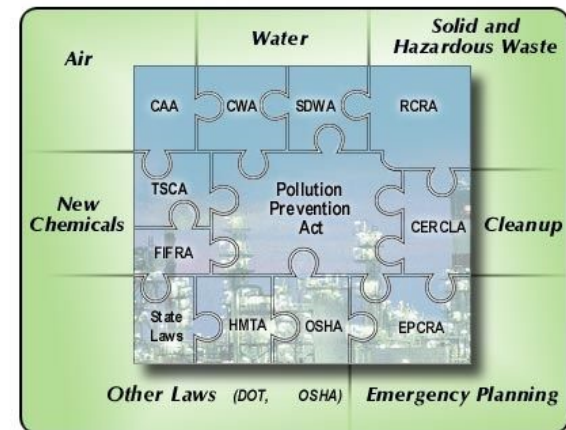
Workshop X

New to EHS?

Meet the

WASTE MANAGEMENT

Regulations Most Likely
to Affect Your Daily Job



Your Presenters



Rajib Sinha, P.E.
Senior Engineer and Project
Manager
Trihydro Corporation
Cincinnati, Ohio



SunCoke Energy™

Kris Singleton
Corporate HES Engineer
SunCoke Energy
Middletown, OH

Course Objectives



Overview of Hazardous Waste Regulations



Generator Requirements



State Variations



What's New

Major Environmental Statutes Laws Behind the Regulations

- Clean Air Act (**CAA**)
- Clean Water Act (**CWA**)
- Resource Conservation and Recovery Act (**RCRA**)
- Safe Drinking Water Act (**SDWA**)
- Emergency Planning, and Community Right-to-Know Act (**EPCRA**)
- Superfund Amendments and Reauthorization Act (**SARA**)
- Toxic Substances Control Act (**TSCA**)
- Comprehensive Environmental Response, Compensation and Liability Act (**CERCLA**)
- Federal Insecticide, Fungicide, and Rodenticide Act (**FIFRA**)

Divisions in 40 CFR

- Subchapter A - General (Parts 1 - 29)
- Subchapter B - Grants and Other Federal Assistance (Parts 30 - 49)
- Subchapter C - Air Programs (Parts 50 - 97) (Clean Air Act)
 - National Ambient Air Quality Standards (NAAQS)
 - Standards of Performance for New Stationary Sources (NSPS)
 - National Emissions Standards for Hazardous Air Pollutants (NESHAP)
 - State Operating Permit Programs
 - Federal Operating Permit Programs

Divisions in 40 CFR (Contd.)

- Subchapter D - Water Programs (Parts 100 - 149)
 - Clean Water Act
 - Discharge of Oil
 - Oil Pollution Prevention
 - Determination of Reportable Quantities For Hazardous Substances
 - Secondary Treatment Regulation
 - Safe Drinking Water Act
 - National Primary and Secondary Drinking Water Regulations
 - Underground Injection Control (UIC) Program
 - Standards on the Maximum Contaminant Level of drinking water (microorganisms, viruses, turbidity, inorganic chemicals, organic chemicals, disinfectants and disinfection byproducts, radionuclides)

Divisions in 40 CFR (Contd.)

- Subchapter E - Pesticide Programs (Parts 150 - 180)
 - Worker protection standards and enforcement
- Subchapter F - Radiation Protection Programs (Parts 190 - 197)
- Subchapter G - Noise Abatement Programs (Parts 201 - 211)
- Subchapter H - Ocean Dumping (Parts 220 - 238) based on the Ocean Dumping Ban Act
- **Subchapter I - Solid Wastes (Parts 239 - 282) based on the Resource Conservation and Recovery Act (RCRA)**
- Subchapter J - Superfund (Parts 300 - 374) based on the Emergency Planning and Community Right-to-Know Act (EPCRA)
- Subchapter N - Effluent Guidelines and Standards (Parts 400 - 471) (Clean Water Act)
- Subchapter O - Sewage Sludge (Parts 501 - 503) (Clean Water Act)
- Subchapter Q - Energy Policy (Parts 600 - 610)
- Subchapter R - Toxic Substances Control Act (TSCA) (Parts 700 - 799)
- Subchapter U - Air Pollution Controls (Parts 1039 - 1068)

Hazardous Waste Regulations

Resource

Conservation

Recovery

Act

- Generation
- Treatment
- Storage
- Disposal
- Transportation
- Recycling
- Reclamation
- Import/Export



PERMIT



Landfills



Storage

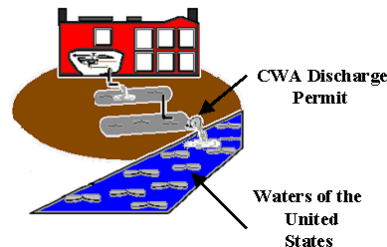
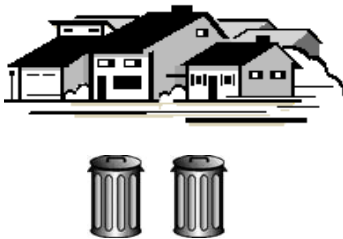


What is a “Solid Waste”?

- “Solid Waste” means any **garbage or refuse, sludge** from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other **discarded material**, resulting from industrial, commercial, mining, and agricultural operations, and from community activities.
- Can be a liquid, semi-solid, or gaseous.
- Any discarded substance is a solid waste unless specifically exempted. Common exemptions – household refuse; discharges subject to Clean Water Act.
- Has to be a “solid waste” to be a “hazardous waste”

Hazardous Waste Exclusions

- Household Wastes
- Domestic Sewage
- Industrial Wastewater
- Nuclear Wastes
- Analytical Samples
- Flyash/Kiln Dust



- Spent Materials
(Recycled)
 - Scrap Metal
 - Solvent Rags (Laundered)
 - Closed-Looped Systems
 - Ingredient Substitutes
 - Product Substitutes
 - Batteries (Special Case)
 - Lamps (Special Case)
 - E-Waste (Special Case)

No Fuel/Land Application

Hazardous Wastes (Specifically Listed)

Wastes Generated by *Generic (F-listed) or Specific (K-listed)* Industrial or Manufacturing Processes

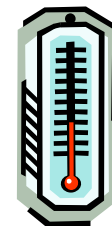
Spent Solvent Wastes – Degreasing (F003)

- Xylene
- Acetone
- Methanol
- Ethyl Acetate
- Ethyl Benzene
- Ethyl Ether
- n-Butyl Alcohol
- Cyclohexanone
- Methyl Isobutyl Ketone



Off Specification/Discarded *Acute (P-listed) or Toxic (U-listed)* Chemical Products

- Commercial Products - Pure/Technical Grade
- Formulations - Sole Active Ingredient
- “Unused” - Not Manufactured Article



Characteristic Hazardous Wastes (4 Properties)

Ignitable (D001)

- Liquid with Flash Point < **140°F**
- Oxidizer
- Ignitable Compressed Gas
- Non-liquid that Causes F Through:
 - Friction
 - Moisture Absorption
 - Spontaneous Chemical Changes



Corrosive (D002)

- Aqueous and has a pH of ≤ 2.0 or ≥ 12.5
- Liquid and Corrodes Steel $\geq \frac{1}{4}$ Inch/Year

Characteristic Hazardous Wastes (4 Properties) – Cont'd

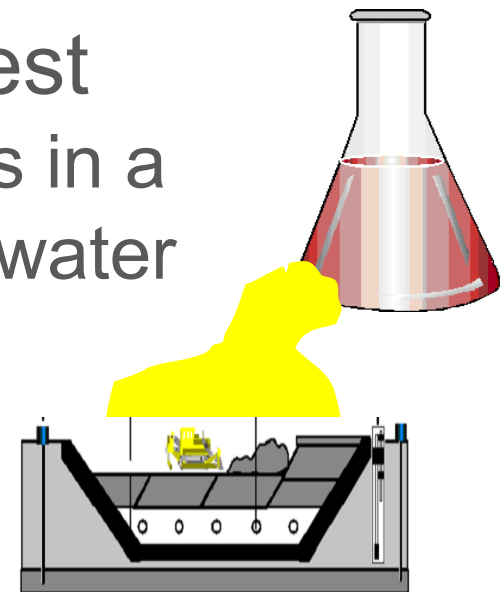
Reactive (D003)

- Normally Unstable
 - Explosives/Shock Sensitive
- Reacts Violently with Water
- Forms Potentially Explosive Mixtures with Water
- Generates Toxic Gases When Mixed with Water
- Reactive Cyanides + Sulfides
- Capable of Detonation if:
 - Subject to Strong Initiating Source
 - Heated Under Confinement
- Defined as Explosive



Characteristic Hazardous Wastes (Toxic D004 – D043)

- 40 Specific Chemicals
 - Solvent/Organic Chemicals
 - Heavy Metals
 - Pesticides
- Failed TCLP Concentrations Test
 - Simulates Migration of Chemicals in a Landfill that Could Impact Groundwater



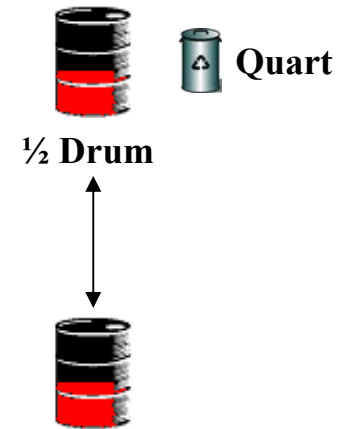
Hazardous Waste Generator Types

- Large Quantity Generator (LQG)
 - >2,200 lbs./Month
 - >2.2 lbs./Month Acute (P) Waste
- Small Quantity Generator (SQG)
 - 220 lbs. > per Month < 2,200 lbs.
 - 13,200 lbs. Maximum on Site
- Very Small Quantity Generator (VSQG)
 - previously CESQG
 - < 220 lbs. per Month
 - < 2.2 lbs. Acute Hazardous (P) Waste
 - 2,200 lbs. Maximum on Site

Highly Regulated



Slightly Regulated



Episodic Generator (Multiple Status Different Months)

Hazardous Waste Generator Requirements

	LQG	SQG	VSQG
Waste Determination	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DOT Shipping Requirements	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
On Site Storage	90 Days	180/270 Days < 13,200 Lbs Max	< 2,200 Lbs
Container/Tank Marking & Labeling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not Required
Weekly Accumulation Area Inspections	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not Required
EPA ID Number	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Optional
Formal Written Training Program	<input checked="" type="checkbox"/>	Not Required (Awareness)	Not Required
Contingency Plan	<input checked="" type="checkbox"/>	Not Required	Not Required
Bi-Annual Waste Report	<input checked="" type="checkbox"/>	Not Required	Not Required

RCRA State Differences

- Ohio
 - LQG Any Month → Must file biennial report
 - File report every other year (due in even years)
- Kentucky
 - LQG + SQG → File Annual Generator Report
 - Annual Generator Registration
 - Requirements for “special wastes”
 - Fee for Waste Streams
- Indiana
 - SQG → File Annual Manifest Report
 - LGQ → Biennial HW Report and Annual Manifest Report

Universal Wastes Regulations



- Typically Hazardous Wastes
- Relaxed Regulations if Recycled
 - Fluorescent Lamps
(Crushing = Treatment H.W.)
 - Lead-Acid/Ni-Cad Batteries
 - Mercury-Containing Equipment
 - Recalled Pesticides



- Ohio recently added non-empty aerosol cans, antifreeze, and paint-related waste to the list
- USEPA added aerosol cans (effective February 20, 2020)

- **Dated** + Marked
 - “Universal Waste” or “Used” or “Waste” + Type

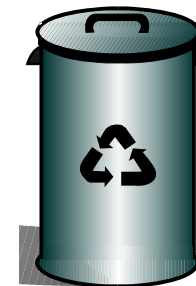
- Managed Prevent Leaks = **Closed Box**
- 1 Year Storage
- Training = Handling + Spill Response



Used Oil Regulations

- Used Oil (**Lubrication**)
 - Refined from Crude/Synthetic
 - Used or Contaminated from Use
- < 1,000 ppm Halogens
- No Hazardous Waste Mixtures
- Mark Containers/Tanks “Used Oil”
- Managed In Drums/Tanks
 - No Severe Rust/Structural Defects
 - No Visible Leaks (Lids Closed)
 - No Exposure to Rainwater

Must be Recycled



WHAT'S NEW

- Hazardous Waste Generator Improvements Rule
- Universal Wastes Changes
- E-Manifests
- Waste Pharmaceuticals
- PFAS / TENORM

RCRA HAZARDOUS WASTE GENERATOR IMPROVEMENTS RULE

- November 28, 2016, EPA published the long-awaited final rule overhauling the hazardous waste generator rules.
- Affected regulations: 40 CFR 257-258, 260-268, 270-271, 273, 279
 - > 60 changes to the regulations
 - Plus ~ 30 technical corrections
- Affected entities:
 - All hazardous waste generators, TSDs, transporters
- Effective Date – **May 30, 2017**
 - Not effective in authorized states until adopted
 - States must adopt more stringent requirements by **July 2018 or 2019**

MAJOR PROVISIONS OF THE FINAL RULE

- Reorganization
- Consolidation of CESQG (VSQG) Waste at LQGs
- Episodic Generation
- Ignitable and Reactive Waste Waiver
- Emergency Preparedness and Prevention
- Waste Determination Expectations
- Labeling
- Notifications and Reporting
- Satellite Accumulation Provisions
- Closure Requirements
- Additional Clarifications

REORGANIZATION

Provision	Existing 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

VSQG CONSOLIDATION OPTION

- Benefits companies with multiple locations
 - At least one location is LQG
 - At least one location is VSQG
- Allows company to consolidate VSQG wastes at their own LQG facility
 - LQG does not need to be a permitted TSDF
 - Must be under control of the same “person,” as defined under RCRA
 - “Control” is the power to direct policies at the facility
- NOT applicable to SQGs
- LQG must notify EPA, keep records of each shipment, manage waste as LQG waste, and include in Biennial Report
- Potential issues when shipping wastes through multiple states

EPISODIC GENERATION

- Benefits facilities with occasional temporary surge in hazardous waste generation
- Allows generator to retain existing (VSQG, SQG) category during episodic generation, provided they comply with a streamlined set of requirements
 - Allows one planned episodic event per year
 - But can petition for second (unplanned) event
 - Must notify EPA at least 30 days in advance (or within 72 hours for unplanned episode)
 - Must complete the episodic event within 60 days (all waste shipped offsite)

EPISODIC GENERATION – CONTD.

- VSQG streamlined requirements: comply with SQG waste management provisions and maintain records
 - Obtain EPA ID Number
 - Use hazardous waste manifest and transporter to ship to RCRA TSD or recycler
 - Manage in a way that minimizes potential for accident or release
 - Label episodic waste containers
 - “Episodic Hazardous Waste”
 - Identify hazards of contents
 - Identify an emergency coordinator at the generator facility
 - Maintain records of episodic event

EPISODIC GENERATION – CONTD.

- SQG requirements:
 - Comply with existing SQG regulations
 - Use hazardous waste manifest and transporter to ship to RCRA TSDf or recycler
 - Label episodic waste containers
 - “Episodic Hazardous Waste”
 - Identify hazards of contents
 - Maintain records of episodic event
- All conditions must be met to retain the episodic generation conditional management benefit

IGNITABLE AND REACTIVE WASTES

- 50-Foot Waiver

- Currently ignitable and reactive wastes are prohibited from storage within 50 feet of the property line

- New allowance: can request site-specific waiver from the local fire authority if unable to meet the 50 foot restriction

- Written waiver required
- EPA delegates responsibility for waiver to local fire “authority having jurisdiction” (AHJ)
- Work with AHJ to determine appropriate site-specific conditions

EMERGENCY PREPAREDNESS

- LQG Contingency Plans must have a “quick reference guide” with most critical information
- Contents of “quick reference guide”
 - Types and amounts of hazardous waste
 - Maps of site and surrounding area
 - Location of water supply
 - Identification of notification system (phones, PA, etc.)
 - Emergency contact(s)
- Who must submit
 - Any new LQG with their first Contingency Plan
 - Any existing LQG, at the first revision of the Contingency Plan following effective date of the regulation

EMERGENCY PREPAREDNESS – CONTD.

- LQG Contingency Plan Emergency Coordinator information
 - No longer required to include certain personal contact information
 - Where 24/7 Emergency Coordinator is available on-site, may list the position(s) rather than employee names
- Clarifies where and what emergency equipment is required
 - Must address all areas where hazardous waste is generated and/or managed
- May use CBT/electronic training for personnel training
- Document that emergency arrangements have been attempted with local authorities
 - Not required to have something back from local authorities, just document that you attempted to make arrangements
 - Waiver option for facilities with on-site response capabilities

WASTE DETERMINATIONS

- Must accurately document hazardous waste determinations
 - Applies to SQGs and LQGs
 - Rule now clarifies applies at the point of generation
 - Does not specifically apply to non-hazardous wastes (although recommended as a BMP)
- Using knowledge to determine waste characteristics
 - Lists types of knowledge previously accepted by EPA
 - Specifically allows alternative test as knowledge

LABELING REQUIREMENTS

Applies to all SQGs, LQGs, Transporters

Label must indicate

- The words “Hazardous Waste”
- **Identification of hazards** NEW
 - Can use any of several established methods to indicate hazards (DOT, OSHA, NFPA, pictogram, RCRA characteristic...)
- **All waste codes** (prior to shipment) NEW
 - May use recognized electronic option (e.g., bar codes)
 - Exception for lab packs
- Accumulation start date

For vessels that can't be labeled (some tanks, drip pads, containment buildings, ...)

- Info can be in records or logs kept near to location of the vessel

NOTIFICATION / RECORDKEEPING

SQG required to re-notify every 4 years

- Electronic option available
- First report not due until September 1, 2021

LQG Biennial Report rules updated to be consistent with current guidance

- LQGs must report all hazardous waste generated in a calendar year, even when it is managed the next year
- LQGs must report for all months in the year, even if SQG for some of those months
- LQGs must report hazardous waste recycled on-site
- Recycling facilities must report wastes that are not stored prior to recycling

SATELLITE ACCUMULATION PROVISIONS

- New section: 40 CFR Specific clarification that hazardous wastes in satellite accumulation cannot be mixed or placed in a container with other incompatible hazardous wastes
- Containers in Satellite Accumulation Areas (SAA) are allowed to remain open under limited circumstances
 - When necessary for safe operations (limited exception)
- Clarifies that the three-day requirement to move containers from satellite accumulation to container accumulation means three calendar days
- For acute hazardous waste, can consider max weight or volume
- Marking and labeling consistent with central accumulation areas

CLOSURE

Closure of generator accumulation units must meet closure performance standards (i.e. “clean close”)

- Existing requirement extended to container accumulation units
- Can defer (with appropriate notice) until full facility closure

Closure requirements for LQG Container Accumulation Areas that cannot clean close

- Must close as landfill
- Place notice in operating record within 30 days after closing a unit within a facility that cannot meet closure performance standards (OR meet closure performance standards and then notify EPA)
- Notify EPA or authorized state no later than 30 days prior to closing a facility
- Notify EPA within 90 days after closure of a facility that cannot clean close

OTHER CHANGES / CLARIFICATIONS

Clarification of generator categories

- Only one generator category can apply in any given month
- Clarification on generator categories for mixtures of acute and non-acute hazardous wastes
- Clarification of generator categories for mixtures of hazardous/non-hazardous wastes

Clarification of tank emptying/turnover within 90 or 180 days

Generator rules now include the long-standing prohibition on landfilling of liquids

Generator status is a monthly determination – not an average

STATE IMPLEMENTATION

Authorized states are **required** to adopt provisions more stringent than current federal (and state) regulations

States are **not required** to adopt the less stringent provisions

- VSQG (CESQG) consolidation
- Episodic generation
- Waiver from 50-foot rule

States are also **not required** to adopt any provisions which are neither more nor less stringent:

- Reorganizing the hazardous waste generator regulations
- Defining central accumulation area and generator categories
- Technical corrections and conforming changes to various parts of the RCRA regulations
- Etc.

STATUS AND IMPLEMENTATION

Final Rule published in the Federal Register on November 28, 2016

- Effective date 6 months after final rule: May 30, 2017 only for states (IA & AK) and territories without RCRA authorization
- Authorized states and territories must adopt all provisions more stringent than current state regulations
 - 1-year implementation schedule (July 1, 2018), or
 - 2-year implementation if statutory change required (July 1, 2019)

State Implementation

- Ohio – Not yet adopted
- Indiana – Incorporated by reference (effective 12/26/19)
- Kentucky - Incorporated by reference (effective 12/7/17)

IMPLICATIONS OF FINAL RULE

So many changes = numerous points of compliance risk

Easy enforcement targets

- SQG quadrennial re-notifications
- Waste determination documentation
- LQG Contingency Plans – Quick Response Guide
- Waste labeling

Expect increasing disparity between state programs

- Generators be aware of state-specific requirements
- For interstate transport, be aware of state-to-state differences

SUMMARY OF MAJOR IMPACTS BY GENERATOR CATEGORY

New Provision	VSQG	SQG	LQG
LQG/VSQG consolidation of wastes	X		X
Episodic generation	X	X	
50-foot waiver			X
Marking and labeling		X	X
Marking RCRA waste codes		X	X
SQG re-notification		X	
Contingency Plan Quick Reference Guide			X
Closure Notification			X
Closure as landfill if can't clean close			X

WHAT DO YOU NEED TO DO?

Update training materials or plans if needed:

- VSQG vs. CESQG
- Regulatory citations

Labeling

- Ensure waste labels include the hazards of the material
- Ensure waste labels include all RCRA waste codes prior to sending offsite

Hazardous Waste Contingency Plan

- Include Quick Reference Guide when plan is updated
- Ensure you have documentation proving you attempted to make arrangements with local authorities

SGQ notification

- Review hazardous waste generator notification, update if needed and re-notify every 4 years



E-Manifests

EPA launched e-Manifest system on June 30, 2018

National electronic manifest tracking system

Receiving charged fees to cover cost to develop/operate

- \$25 - Mailed in paper manifest
- \$20 – Scanned image upload
- \$14 – Manifest data plus image upload
- \$8 – Electronic manifest (fully electronic & hybrid)

Generators need to register for e-Manifest if they wish to sign manifests electronically, view records or submit corrections

Pharmaceutical Wastes

- New rule on February 22, 2019 standardizes how healthcare facilities and reverse distributors handle hazardous waste pharmaceuticals. EPA will now implement RCRA Part 266, Subpart P in replacement of Part 262.
- “Creditable” (unsold/unused) pharmaceuticals that can be returned to the manufacturer will not have accumulation limits, container standards, or labeling requirements.
- Non-creditable hazardous waste pharmaceuticals will have a one-year accumulation limit, minimum container standard, and labeling requirements.
- Bans sewer disposal nationwide from August 21, 2019.
- States have until July 1, 2021 or 2022 to adopt the rule.

PFAS and TNORM

- Per- and polyfluoroalkyl substances (PFAS)
 - Synthetic, environmentally persistent (firefighting foam, nonstick cookware, textiles, etc.)
 - 1/15/2020 – Environmental groups petitioned EPA to regulate certain PFAS chemicals as hazardous waste
 - EPA has added to list of chemicals that require TRI reporting
 - Must track in 2020 and report in 2021
- TENORM
 - Technologically Enhanced Naturally Occurring Radioactive Materials
 - “concentrated” by having been processed
 - Mining wastes, coal combustion residuals, wastewater treatment residuals
 - Waste receiving facilities are screening in-coming containers

Top Waste Violations

1. Waste Identification
 2. Inspections
 3. Emergency Preparedness and Contingency Planning
 4. Permitting
 5. Container Management – incompatibles and open container
 6. Container Marking, Labeling, and Dating
 7. Personnel Training
 8. Universal Waste Management
 9. Transporter Requirements
- 

Identifying Wastes at Your Facility

- Purchasing records and SDSs
 - Identify what is being purchased and be familiar with the chemical components and composition
- Facility Walk-Through
 - Observe discarded material
- Sampling and analysis of unknown waste streams
 - E.g., paint booth filters, oil/water sludge
- Review Waste Profiles for past shipped wastes

What Can You Do?

- Start Reading the Regulations
 - Everything is Not in All One Place
- Call the Agency & Ask For Help
- Contact a Regulatory Expert
 - Internet Chat Groups
 - Agency Web Sites (**Guidance Documents**)
 - Trade Groups
 - Environmental Consultant
 - Knows Your Industry Specifically
 - Broad Based Regulatory Experience
 - Assessment vs. Full Blown Audit



Your Questions

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