New Part 111 Rules - Generator Improvement Rules, Aerosol Cans, & New RCRA, Subpart P

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Covid-19 Emergency Orders

- On March 23, 2020, Governor Whitmer issued her Stay Home, Stay Safe, Executive Order to slow the spread of COVID-19. The most recent version of the order, EO 2020-77, took effect May 7, 2020
- According to EO 2020-77, no person or entity shall operate a business or conduct operations that require workers to leave their homes or places of residence except to the extent that those workers are necessary to sustain or protect life, to conduct minimum basic operations, or to perform a resumed activity specifically authorized under EO 2020-77
- Government, businesses and operations are to designate workers who are authorized to work under EO 2020-77
- Government, businesses and operations must also adopt social distancing practices, provide personal protective equipment specified under EO 2020-77 for employees and use other mitigation measures to protect workers and patrons in the performance of that in-person work.

The final, new Part 111 Rules are not yet effective. The final new rules must reside with the Joint Committee on Administrative Rulemaking for 15 session days after which they can be filed with the Office of the Great Seal and will take effect seven days later. To get timely e-notifications on the effective date of the final, new rules and information about new and updated publications, **SUBSCRIBE** to receive our EGLE Waste News and Updates.

- Executive Order 2020-77 designates workers who are necessary to sustain or protect life and adopts the March 19, 2020, U.S. Cybersecurity and Infrastructure Security Agency guidance for determining critical infrastructure workers
- In determining whether a business or operation is considered critical infrastructure or otherwise authorized to work under the EO 2020-77, businesses and operations are to:
  - Review EO 2020-77 and Frequently Asked Questions available at Michigan.gov/Coronavirus
  - Refer to the March 19, 2020, Cybersecurity and Infrastructure Security Agency guidance,
- The executive order broadly prohibits in-person work unless specifically authorized in EO 2020-77, necessary to sustain or protect life, or necessary to conduct minimum basic operations
- Conducting minimum basic operations may include activities required to comply with EGLE permits and environmental laws/standards
- EGLE monitors questions related to EO-2020-77 sent to EGLE-Reporting@mi.gov
- EGLE established a process for handling enforcement discretion due to COVID-19
- To access information on that process, go to Michigan.gov/EGLE, where it is spotlighted on the top of the page
- All requests for enforcement discretion should follow the procedures provided and be submitted to EGLE-EnforcementDiscretion@mi.gov
- Procedure requires that the following information be submitted to EGLE:
  - The specific regulatory requirement in question, including identification of any permit, order, or agreement that applies to the entity's obligations
  - A concise statement describing the circumstances preventing compliance and how the compliance issue is impacted by the COVID-19 response - regulatory flexibility is only for COVID-19 prompted non-compliance
  - The steps taken to avoid the compliance issue, including whether you contacted EGLE for assistance and why the compliance issue was not reasonably avoidable
  - The anticipated duration of the compliance issue and whether it may create an acute risk or

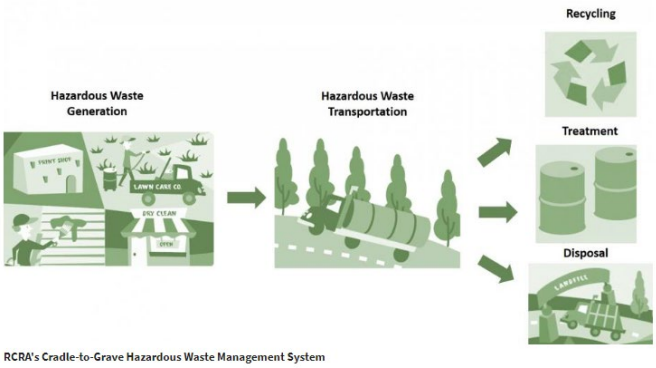
imminent threat to human health or the environment, if this is the case, please call 800-292-4706
    - A description of measures planned to protect public health and environment during period the requirement(s) cannot be met
    - A central point of contact for the site, including an email address and phone number

Status of Generator Improvements Rules (GIR) in Michigan

- Rule Writer - Ronda Blayer blayerr@michigan.gov
- November 28, 2016, GIR published in 81 Federal Register 85732 under the authority of the federal RCRA
- Midyear 2020 GIR are expected to take effect in Michigan under new, final Part 111 rules that are not yet effective
- Register now for EGLE Waste Webinar Series at Michigan.gov/EGLEEvents to learn more about Michigan's roll-out of GIR

Generator Improvement Rules Context

- Since 1976, RCRA has tracked "cradle to grave" management of hazardous waste
- Hazardous waste is tracked from the time it is created, while it is transported, where it is treated and/or stored, and where it is ultimately disposed
- The "cradle to grave" concept is required of all hazardous waste generators unless an exemption can be proven by the generator



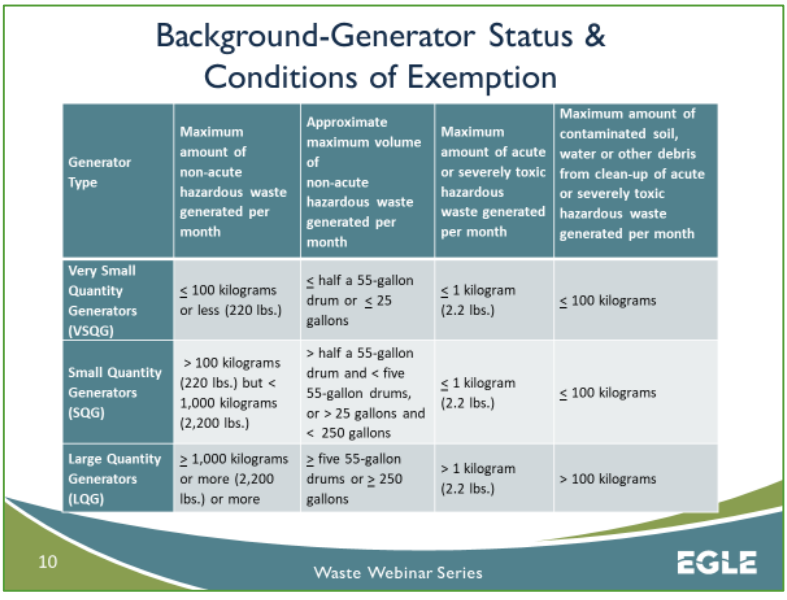
RCRA's Cradle-to-Grave Hazardous Waste Management System

Generator Improvements Rule Background

- RCRA regulates the management of solid waste (garbage), hazardous waste, and underground storage tanks holding petroleum products or certain other chemicals
- RCRA program goals include:
- ***Protecting*** human health and the environment from the ***potential hazards*** of waste disposal
- ***Conserving*** energy and natural resources
- ***Reducing*** the amount of waste generated

Generator Status & Conditions of Exemption

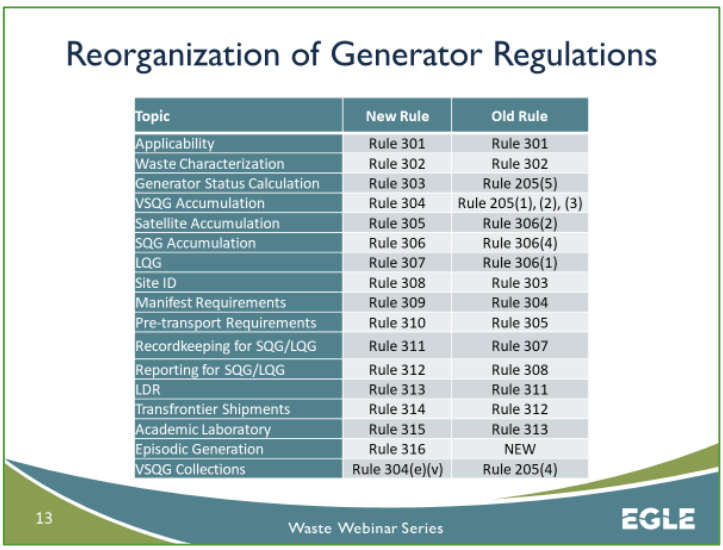
- Complying with the hazardous waste generator exemption conditions for very small quantity generators (VSQGs), small quantity generators (SQGs) and large quantity generators (LQGs) results in the generating location not being subject to obtaining a hazardous waste treatment storage and disposal facility (TSDF) license



GIR Changes

- Reorganized Regulations
- Waste Characterization Determination
- Marking and Labeling

- Episodic Generation
- VSQG Waste Consolidation
- Contingency Planning
- Closure
- Recordkeeping and reporting



Hazardous Waste Determinations (aka Waste Characterization)

- Clarifies the waste determinations **must be accurate**
- Confirms <u>when</u> a generator's hazardous waste determination must be made
- Elaborates on <u>how</u> to determine if a solid waste is either a listed and/or characteristic hazardous waste.
- Reiterates <u>what</u> waste determination records must be kept
- Requires SQGs and LQGs to identify and mark waste codes on containers prior to sending hazardous waste off-site

Hazardous Waste Determination - When

- Rule 302 states:
  - (1) A person who generates a waste as defined in R 299.9202 shall make an **accurate** determination if that waste is a hazardous waste to ensure the waste is properly managed under these rules. A hazardous waste determination must be made using the following method:
  - (a) The hazardous waste determination for each waste must be made at the **point of waste generation, before 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 classification of the waste under these rules may change
- Per Rule 104, "generator" means any **person**, by site, **whose act or process produces hazardous waste** identified or listed in part 2 of these rules or **whose act first causes a hazardous waste to become subject to regulation**
- Why at the point of waste generation? To ensure:
  - Proper waste identification
  - Proper handling and management from "cradle to grave"
  - Compliance with land disposal restrictions
- When a waste is awaiting test results, the generator must label and manage as hazardous waste
- Have you ever seen a full container of toluene with an open top?
- Paint related waste is an example of waste that must be characterized at the "**point of generation**" **before it evaporates**!
- Have you ever been told by your "dumpster vendor" **NO** liquid nor solvents and thought, I'll just let it "dry out" before recycling it or tossing it in the dumpster?
- Not acceptable, waste determination-must occur "at the point of generation" and the waste must be managed there forward to meet the hazardous waste or liquid industrial by-products regulations

Hazardous Waste Determination – How?

- Using "tests" as part of "knowledge" for making a characteristic hazardous waste determination
- The results of <u>non-regulatory</u> tests may also provide relevant information:

- Total concentration in the waste may show the waste is not a toxic hazardous waste
- Tests that evaluate properties similar to the characteristic may be relevant, even if they do not define the waste as hazardous by themselves
- SW-846 includes several guidance tests, including Test Method 1040 for oxidizers, and others
- EXAMPLE, use of totals analysis (test as knowledge) vs. TCLP (regulatory test)
- See EPA's guidance titled "Can totals analysis be used in lieu of the TCLP for determining the toxicity characteristic?"
- Per Rule 302(b)(ii)
    - If available knowledge is inadequate to make an accurate determination, the generator shall test the waste according to the methods set forth in R 299.9212 or according to an equivalent method approved by the director under R 299.9215 and in accordance with the following:
    - (A) A generator testing his waste shall obtain a representative sample of the waste for testing.
    - (B) If the test method is set forth in R 299.9212 or approved under R 299.9215, the results of the regulatory test, if properly performed, are definitive for determining the regulatory status of the waste.
- Where a test method is specified in Rule 212, the results of the regulatory test, when properly performed, are **definitive** for determining the regulatory status of the waste.
- Hazardous characteristic determination must be made regardless of the listing status in order to:
    - Comply with land disposal restrictions requirement to identify all underlying hazardous constituents and
    - Comply with drum labeling requirements

Waste Determination/Characterization - RCRA Program Goals

- To ***protect human health*** and the ***environment*** from the ***potential hazards*** of waste disposal
- To conserve energy and natural resources
- To reduce the amount of waste generated

Labelling Hazardous Waste Codes - Rule 310 Pre-transport Requirements

- Before transporting hazardous waste or offering hazardous waste for transport, small quantity and large quantity generators shall:
    - (d) Mark each container of 119 gallons or less with the following words and information:
    - (v) The hazardous waste numbers identifying the waste.
    - (e) A generator may use a nationally recognized electronic system, such as bar coding, to identify the hazardous waste number, as required by subdivision (d)(v) or subdivision (f) of this subrule.

Marking and Labeling

- Per Rules 304, 305, 306 and 307 for satellites, SQGs, and LQGs:
    - Containers and tanks must be labeled with labels that indicate the **hazards of their contents**.
    - Containment buildings must have a sign in a conspicuous place with the words **"Hazardous Waste"** and the hazard indicators to improve risk communication for workers, waste handlers, emergency responders, and visitors.
    - Hazard indication options include hazard communications consistent with the U.S. DOT placards, OSHA GHS pictograms, or NFPA chemical hazard labels.
- Labeling is required at the **point of generation.**
- Generators can mark the outer/secondary container or attach a tag with the required information on containers with small containers inside (e.g.. tubes, vials, etc.).
- Existing marking and labeling is sufficient for containers that already have appropriate marking and

labeling (e.g., a commercial chemical product (CCP) in its original container with an intact label), provided it indicates the hazards of the chemical and the generator adds the words "Hazardous Waste."

Marking and Labeling - RCRA Program Goals

- To ***protect human health*** and the ***environment*** from the ***potential hazards*** of waste disposal
- To conserve energy and natural resources
- To reduce the amount of waste generated

Episodic Generation Records

- Has notification, record keeping and timeline requirements
- Provides relief when all conditions for eligibility are met
- Types of Episodic Events:
  - Planned Event - periodic maintenance like tank cleanout
  - Unplanned Event like production upset, spill, act of nature nature)
- VSQG and SQG episodic events require **notification**:
  - Planned - Notify 30 or more days prior to event using Site ID form
  - Unplanned: Notify within 72 hours of the event by phone/email, followed by a Site ID form
- Episodic hazardous waste must:
  - Be transported by a **hazardous waste transporter**, on a **manifest**, to a RCRA-designated facility (**TSDF or recycler**) within **60 calendar days** of the episodic event
  - Be marked and Labeled - **"Episodic Hazardous Waste"** and with **hazard indicators**
- Records must be maintained for 3 years from completion of each event
- Record of event(s much include:
  - Beginning and end date of event
  - A description of the episodic event
  - A description of the types and quantities of hazardous wastes generated
  - The name of the RCRA designated facility or facilities that received the hazardous waste
  - Name of the hazardous waste transporter(s)
  - EGLE approval if a petition was submitted and granted for a second event in a calendar year
  - Site ID Form aka EPA ID
- Site ID Form aka EPA ID
  - The EQP5150 form must be used to obtain a Michigan Site or EPA ID from EGLE.
  - The form and instructions are found at Michigan.gov/EGLEWaste

Episodic Generation - RCRA Program Goals

- To protect human health and the environment from the potential hazards of waste disposal
- To ***conserve energy*** and ***natural resources***
- To reduce the amount of waste generated

VSQG Consolidation

- Consolidation is a conditional relief - All conditions must be met to be eligible for relief.
- When a LQG and VSQG are under the control of the same person, the LQG can consolidate their VSQG's waste and send it for hazardous waste disposal
  - Person means an individual, trust, firm, joint stock company. federal agency, corporation, including a government corporation, partnership, association, state, municipality, commission, political subdivision of a state, or any interstate body
  - Control means the power to direct policies at the facility
  - Contractors who operate generator facilities on behalf of a different person are do not control

the generator

- VSQGs must:
    - Characterize waste streams and keep records of the determinations for at least 3 years
    - Maintain information to verify the VSQG monthly generator category determination for at least 3 years
    - Mark each container of hazardous waste with the words "Hazardous Waste"
    - Mark each container of hazardous waste with a description of the waste and an indication of the hazards of the contents
    - VSQG Consolidation
    - VSQGs must:
    - Accumulate VSQG hazardous waste liquids in an area protected from weather, fire, physical damage, and vandals and prevents hazardous waste from escaping by gravity into the soils, directly or indirectly, into surface or groundwaters, or into drains or sewers and so that fugitive emissions do not violate the air pollution control regulations
    - Ensure no hazardous wastes with free liquids are landfilled
    - Use a shipping document and liquid industrial by-products transporter is for VSQG liquids
- LQGs must:
    - Notify EGLE of the VSQG consolidation activities at least 30 days prior to receiving the first shipment using the Site ID Form
    - Label VSQG containers with the date accumulation starts, which is the date the hazardous waste was received from the VSQG
    - If the LQG consolidates hazardous waste from a VSQG with its own hazardous waste or with hazardous waste from other VSQGs, the LQG must label each container or tank with the earliest date any hazardous waste was placed in the container at the LQG location
    - Maintain adequate aisle space at all times for emergency personnel to access hazardous waste
    - VSQG Consolidation
    - LQGs must:
    - Maintain records that provide the following details for each VSQG shipment for at least three years:
        - VSQG name and site address
        - VSQG contact, phone number and e-mail
        - Description of the hazardous waste received
        - the quantity and the date the hazardous waste was received
    - Manage consolidated waste as fully regulated LQG hazardous waste
    - Send the VSQG waste for treatment/disposal at a licensed TSDF within 90 days of the accumulation date
    - Use a permitted and licensed hazardous waste transporter
    - Document shipment for recycling/disposal on a Uniform Manifest
    - Report VSQG consolidation activities in Biennial Reporting using a G51 source code to distinguish from the LQG's own waste
- EPA did not extend the VSQG consolidation option to SQGs; however, SQGs can participate if they notify and act as an LQG, meeting all LQG standards including getting the VSQG hazardous waste off-site in 90 days

VSQG Consolidation - RCRA Program Goals

- To protect human health and the environment from the potential hazards of waste disposal
- To *conserve energy* and *natural resources*

- To reduce the amount of waste generated

Contingency Planning

- LQGs must have a **Contingency Plan Quick Reference Guide** providing quick access to key details needed by emergency reponders including:
    - **Types and names of hazardous waste** handled in layman's terms and the hazards associated with each (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid)
    - Maximum **amount of each hazardous waste** that may be present at any time
    - Any **unique threats** including any special medical treatment that might be necessary as a result of exposure during an emergency
    - A **site map** showing where hazardous wastes are generated, accumulated, and treated, and access routes
    - A **street map** for the site, including on-site and public roads, nearby businesses, schools, and residential areas, and the location of any fire hydrants and other water supplies (access type and flow rate) to gain access for **water and fire suppression**, and establish evacuation routes for citizens and workers
    - On-site **alarm system details**, including capabilities (notification systems, speakers, etc.) used to notify citizens and workers of an emergency
    - Names and phone numbers of emergency coordinators
- See Iowa's Contingency Plan Quick Reference Guide Example
- Rule 306(1)(l) and Rule 307(1)(f)
    - Require SQGs and LQGs to **document** that they made attempts to make arrangements with local emergency responders, even if they're unsuccessful in having a facility walk-through and plan review
    - No specific form or type of documentation is required
    - A summary of the results of the communications must be included in the facility record for at least three years
- Per 40 CFR 262.261(d), adopted by reference, emergency coordinator personal information is no longer required **WHEN** an emergency number that is staffed by the facility at all times is provided
- SQGs and LQGs may determine the most appropriate locations for emergency equipment, when it is not possible or unsafe to have the equipment located immediately next to the generating equipment.
- SQGs emergency response posting information must be posted next to telephones or in areas directly involved in the generation and accumulation of hazardous waste.
- SQGs and LQGs have the option to use contractors to address releases (containment/cleanup).

Contingency Planning - RCRA Program Goals

- To ***protect human health*** and the ***environment*** from the ***potential hazards*** of waste disposal
- To conserve energy and natural resources
- To reduce the amount of waste generated

Closure

- SQG closure requirements are found in Rule 306(d)(ii)(G).
- LQG closure requirements are found in Rule 307(k).
- At SQG site closure, the SQG must remove all *hazardous waste from tanks, discharge control equipment, and discharge confinement structures and manage it as a hazardous waste.*
- At the time of closure of accumulation unit, LQGs must:
    - Notify EGLE using the Site ID form
    - Close as a landfill if unable to meet clean closure performance standards
- Closure does not apply to satellite accumulation areas
- Notification required 30 days prior to closing facility and 90 days after closing facility to certify that

they met closure performance standards - Extension requests must be submitted within 75 days after closing

- LQG closing waste accumulation unit may:
    - place notice in operating record within 30 days after closing waste accumulation unit and address closure when facility closes (notice can be removed from the operating record if unit going back into service),
    - Notify via Site ID form they have met closure standards for their waste accumulation units
    - Required 90 days after closure

Closure - RCRA Program Goals

- To ***protect human health*** and the ***environment*** from the ***potential hazards*** of waste disposal
- To conserve energy and natural resources
- To reduce the amount of waste generated

Reporting

- Episodic generation (Site ID form)
- VSQG consolidation (Site ID form and BR)
- LQG Closure - waste accumulation unit(s) (Site ID form)
- SQG and LQG Re-notification (Site ID form)
- SQG and LQG Re-notification (Site ID form) – Per Rule 308
    - (5) A **small** quantity generator shall re-notify the regional administrator or the regional administrator's designee starting in 2021 and **every 4 years** thereafter. This re-notification must be submitted by September 1 of each year in which the re-notifications are required.
    - (6) A **large** quantity generator shall re-notify the regional administrator or the regional administrator's designee by March 1 of each **even-numbered year** thereafter. A large quantity generator may submit this re-notification as part of its biennial report required under R 299.9312.

Recordkeeping

- Arrangements with local authorities
- 50-foot waiver
- Tanks
- 50-foot Waiver - Rule 307 (1)(b)(i)(G)(I)
    - Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the large quantity generator's property line unless a written approval is obtained from the authority having jurisdiction over the local fire code allowing hazardous waste accumulation to occur within this restricted area. A record of the written approval must be maintained on site as long as ignitable or reactive hazardous waste is accumulated in this area.
- LQG Tanks - LQG's -Rule 307(b)(ii)(B)
- (B) Use inventory logs, monitoring equipment, or other records to demonstrate that hazardous waste has been emptied within 90 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 90 days of first entering. The inventory logs or records must be kept onsite and readily available for inspection.

Recordkeeping/Reporting - RCRA Program Goals

- To ***protect human health*** and the ***environment*** from the ***potential hazards*** of waste disposal
- To conserve energy and natural resources
- To reduce the amount of waste generated

Universal Waste Types

- Universal Waste is a conditional relief, all conditions must be met to be eligible for relief.
- Michigan facilities may choose to handle the following types of waste as a universal waste consistent with federal regulations:
    - Batteries, including spent dry cell, lead-acid, and lithium ion.
    - Pesticides, including certain suspended, canceled, or unused pesticides.
    - Electric lamps, including fluorescent, high intensity discharge (HID), sodium vapor or high-pressure sodium, mercury vapor, neon, metal halide, and incandescent lamps.
    - Devices containing elemental mercury, including thermostats, switches, thermometers, manometers, barometers, anti-locking braking systems (ABS), gas flow regulators, hydrometers, blood pressure cuffs and various medical devices, etc.
- Michigan facilities may choose to handle the following types of waste as a universal waste *in* **Michigan only**:
    - Pharmaceuticals or drugs, both prescription and non-prescription, used to diagnose, treat, cure, and prevent physical or mental illness in human and animals.
    - Consumer electronics or devices run by electricity containing circuit boards commonly found in offices and homes such as computers, fax machines, telephones, cell phones, televisions, and printers.
    - Antifreeze, meaning a mixture containing ethylene glycol or propylene glycol used as a heat transfer or dehydration fluid.

Universal Waste Handling Requirements

- Prohibited from disposing of universal waste
- Prohibited from diluting or treating universal waste except as authorized by license or rule
- Must manage universal waste to avoid releases
- Employees must be informed about proper handling and emergency procedures
- Must be labeled with specific details for each universal waste type
- Must accumulate universal waste for one year or less
- Containers must be kept closed, except consumer electronics
- LQH must notify of universal waste activities for each universal waste type handled
- Must comply with DOT shipping requirements
- Must obtain agreement from receiver of universal waste to receive the waste
- Must comply with EPA exporter requirements
- Must send UW ultimately to a notified UW destination facility authorized to treat, store and disposal of the waste
- Must comply with Part 121 liquid industrial by-product requirements if contains any free liquids
- Shipments must be on a “shipping document” (can be bill of lading, or other DOT accepted shipper)
- Must use permitting/registered liquid industrial by-products transporter for liquids
- Receiving designated facility must send timely verification of receipt to generator
- Receiving designated facility must report to EGLE annually how much was collected by 4/30 each year

Aerosol Cans

- 11/15/19, EPA issued final rulemaking establishing aerosol cans as a universal waste, with the rule becoming effective 2/20/20
- As part of current rule package, **Michigan is adopting 40 CFR 273 and establishing aerosol cans as a universal waste**, making it easier to manage non-empty aerosol cans, sending them for hazardous waste recycling.
- Per Rule 101

    - (q) "Aerosol can" means a non-refillable receptacle containing a gas compressed, liquefied, or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.
    - (r) "Aerosol can processing" means the puncturing, draining, or crushing of aerosol cans.
- Per Rule 228(2)(r) and (s) the universal waste requirements do not apply to:
    - Aerosol cans that are not a waste:
        - Unused aerosol cans become a waste on the date the universal waste handler decides to discard it
        - Used aerosol can become a waste when discarded
    - Aerosol cans that are not a hazardous waste:
        - An aerosol can is a hazardous waste if it contains a substance that is listed or if exhibits a hazardous waste characteristic
        - An aerosol can that is empty under R 299.9207
- Per Rule 228(2)(e) non-empty aerosol cans that contain pesticides may be managed as universal waste aerosol cans
- Per Rule 228(4)(c) VSQG and household hazardous waste aerosols when mixed with other universal waste are subject to the universal waste regulations

Aerosol Cans - Additional Handling

- Handler must:
    - Label can or container “Universal Waste—Aerosol Cans,” “Waste Aerosol Cans,” or “Used Aerosol Cans”.
    - Manage universal in a way that prevents releases
    - Accumulate aerosol cans in a structurally sound container compatible with the aerosol can contents and lacking evidence of leakage, spillage, or damage that could cause leakage
    - Aerosol Cans - Additional Handling
    - Accumulate aerosol cans in an area protected from heat sources
    - Package aerosol cans showing leakage in a separate closed container or overpacked with absorbents, or immediately puncture and drain in accordance with the rule.
- Handler may:
    - Sort aerosol cans by type if the aerosol cans are intact
    - Mix intact cans in 1 container
    - Remove actuators to reduce risk of release
    - Puncture and drain **empty** aerosol cans, if the cans are recycled and residual liquids are properly characterized and managed
- If processing **empty** aerosol cans,
    - Use device designed to safely puncture aerosol cans and contain both liquid and air emissions
    - maintain a copy of the manufacturer's specification and instruction on site
    - ensure employees operating the device are trained in the proper procedures.
    - Aerosol Cans - Additional Handling
    - Establish and follow written procedures covering:
        - safe processing
        - proper assembly, operation, and maintenance of processing equipment
        - segregation of incompatible wastes
        - practices to prevent fires or releases, and how to respond to a release

Universal Waste - RCRA Program Goals

- To ***protect human health*** and the ***environment*** from the ***potential hazards*** of waste disposal

- To *conserve energy* and *natural resources*
- To *reduce* the amount of *waste* generated

Aerosol Can- Management Options Over Simplified

- Manage aerosol can as "Hazardous Waste"
- Puncture aerosol cans prior to accumulation, then manage the liquid contents as "Hazardous Waste" (e.g. often satellite accumulation) and the empty can as "scrap metal".
- Manage aerosol cans as "Universal Waste"

New RCRA 40 CFR, 266, Subpart P, Hazardous Waste Pharmaceuticals

- Rules published on 2/22/19 and became effective 8/21/19
- Sector (healthcare) and waste type (pharmaceutical) specific rules
- **Bans healthcare sewering hazardous waste** pharmaceuticals across the US and in US territories as of 8/21/19
- Michigan has until 2/22/22 to adopt remaining provisions
- Simplest option is to manage pharmaceuticals as a universal waste in Michigan, sending them for hazardous waste incineration

Subpart P - RCRA Program Goals

- To *protect human health* and the *environment* from the *potential hazards* of waste disposal
- To *conserve* energy and *natural resources*
- To reduce the amount of waste generated

Part 121 Liquid Industrial By-products Reminders

- All liquid industrial by-products generators must perform a waste evaluation consistent with Part 111 and maintain a record of the **characterization** determination for at least three years.
- A liquid industrial by-product **shipping document that includes the following information** must be created and certified by the generator and transporter prior to transporting the shipment:
    - Name and address (site or mailing) of the generator
    - Name of the transporter
    - Type and volume of liquid industrial by-product shipped
    - Date the liquid industrial by-product was shipped
    - Name, address, and Site ID number of the designated facility
- Liquid industrial by-product <u>can</u> only be transported by a permitted and registered liquid industrial by-products **transporter who must deliver it to the designated facility listed on the shipping document**.
- A liquid industrial by-product generator must receive **confirmation** that their shipment has arrived at the designated facility and maintain that record for at least 3 years.
- The generator, transporter, and designated facility must also retain the shipping document for at least 3 years.

Hazardous Waste vs Liquid Industrial By-products - Which is easier?

- Both require:
    - Accurate characterization
    - Permitted/registered transporters
    - Record documenting cradle to grave handling (generator, transporter and receiving facility))
    - Container/tank management (labelled, closed, protected from weather, etc.)
    - Record retention
    - Emergency preparedness
- Does the generator/transporter have documentation "waste" was accepted by the Designated Facility?

Wrap Up

- With regards to waste characterization determinations:
    - How do you know they are accurate and representative?
    - Is the person making the determination qualified?
- Keep documentation!
- Generators remain responsible for proper characterization event if a vendor is assisting with the characterization determination.
- Hazardous Waste Generator

To Learn More…

- See updated Waste Characterization and Contingency Planning Guidance
- See the new draft Very Small Quantity Generator and draft Generator Accumulation Requirements Guides
- Join us our upcoming webinars in the Waste Webinar Series accessible at Michigan.gov/EGLEEvents
- See the Solvent Wipes, Hazardous Secondary Materials, Aerosol Can and Universal Waste guides
- EPA generator website at EPA.gov/hwgenerators
- EPA Generator Improvements Rule website at EPA.gov/hwgenerators/final-rulehazardous-waste-generator-improvements
- Link to the map of states that have adopted the GIR at EPA.gov/hwgenerators/where-hazardous-waste-generator-improvementsrule-effect
- FAQs for implementing the new rule at EPA.gov/hwgenerators/frequentquestions-about-implementing-hazardous-waste-generator-improvements-final-rule