

# Everyday Hazardous Waste



# Introduction

- This presentation is aimed at young professionals and veterans who are new to hazardous waste.
- The presentation will go over :
  - What is a waste
  - Generator Status
  - Waste Determination
  - Waste Counting
  - Container Requirements
  - Tank Requirements
  - Labeling
  - Difference between a SAA (satellite accumulation area) and CAA (centralized accumulation area).
  - Notifications
  - Reports
  - And Inspections



# What is a solid waste?

- What is a solid waste?
  - For RCRA, solid waste is defined in LAC 33:V.109 (40 CFR 261.2).
  - Solid wastes are anything that is discarded, abandoned or recycled.
  - A material must first be determined to be a solid waste before it can be a hazardous waste.
    - LAC 33:V.105.D.1 (40 CFR 261.4(a)) lists out materials that are excluded from the definition of solid waste.
    - LAC 33:V.105.D.2 (40 CFR 261.4(b)) lists out material that are by definition solid wastes, even if they would otherwise be characteristic or lists hazardous waste.
    - There are other waste streams that have been excluded from solid waste in Louisiana under LAC 33:VII.301.



# What is a hazardous waste?

- What is a hazardous waste?
  - A hazardous waste is a solid waste that is either characteristically hazardous (ignitable, corrosive, reactive or toxic) or is a listed waste (F-series, K-series, U-series, or P-series).
  - Characteristic wastes (D-series) are wastes that meet the criteria to be a hazardous waste.
    - D001, flashpoint below 140°F
    - D018, contains greater than 5ppm benzene



# What is a hazardous waste?

- What is a hazardous waste?
  - Listed Wastes
    - F-Series; Hazardous Wastes from Nonspecific Sources
      - F003, F005, typical waste codes for industrial paint
      - F038, petroleum refinery secondary oil/water/solid separation sludge
    - K-Series; Hazardous Wastes from Specific Sources
      - K171, K172; Spent hydro treating catalyst from petroleum refining operations, including guard beds used to desulfurize feed to other catalytic reactors.
    - U-Series; Unused or off specification commercial chemical products and intermediates
      - U002, acetone
      - U140, isobutyl alcohol
    - P-Series; Acute (toxic or reactive) hazardous waste
      - P001, Warfarin (toxic)
      - P009, ammonium picrate (shock sensitive reactive)



# Waste Determination

- A waste determination is where the operator determines whether a material is a solid waste or hazardous waste.
- All generators should conduct a waste determination for all wastes generated by the facility and must be conducted prior to any mixing or dilution with other materials. Commonly, we refer to this as “AT THE POINT OF GENERATION”
- Failure to make a proper waste determination can lead to improper management, use or disposal of a waste. All three can have very steep remedies or penalties.
- By-products by definition are considered solid wastes because they are not the primary product of the process.
  - Facilities can still reclaim and recover by-products, but will need to follow either solid waste or hazardous waste exclusions, exemptions, or other authorizations.



# Waste Determination

- Consequences of a bad waste determination
  - Improper storage and holding times
    - Generators only have a prescribed storage and holding time without requiring a permit.
  - Increases disposal or treatment cost
    - Waste is improperly coded and requires more costly treatment or disposal.
    - Inadvertently mixing listed waste with solid waste.
  - Treatment or disposal at a facility or unit that is not permitted to manage hazardous waste.
    - Hazardous waste disposed of in a solid waste landfill may require removal from the active cell.
  - Improper transport
    - Failure to meet hazardous materials transportation requirements
    - Failure to ship to valid destination facility
    - Failure to use the proper hazardous waste manifest.



# Waste Counting

- Why is it important and why does it matter?
- Hazardous waste/RCRA generators are regulated based on the amount of hazardous waste generated each calendar month.
  - Each generator status has different requirements for storage amount and duration requirements, disposal requirements, reporting requirements, etc.



# Waste Counting

- How to count hazardous waste:
  - 1) Count the total amount of hazardous waste generated in a calendar month.
    - If both acute and non-acute waste is generated at the facility, count each separately to determine generator status based on the amount of acute or non-acute waste generated.
  - 2) Subtract all waste generated that is excluded or managed under alternative standards. These include the following:
    - Exempted wastes
    - Wastes immediately treated upon generation through elementary neutralization, waste water treatment or total enclosed facilities
    - Recycled on site (LAC 33:V.4105.D)
    - Spent lead-acid batteries managed under LAC 33:V.4145)
    - Managed as used oil (LAC 33:V.Chapter 38)
    - Managed as universal waste ( LAC 33:V.Chapter 38)
    - Managed as an episodic event



# Generator Status

- Now that we know how to determine if something is a hazardous waste and how to calculate the amount of waste generated, we can determine what the generator status is.
- There are three classes of hazardous waste generators:
  - Very Small Quantity Generator of Hazardous Waste  
(LAC 33:V.1009 / 40 CFR 262.14 )
  - Small Quantity Generator of Hazardous Waste  
(LAC 33:V.1013 / 40 CFR 262.16 )
  - Large Quantity Generator of Hazardous Waste  
(LAC 33:V.1015 / 40 CFR 262.17)



# Generator Status

Generators Categories Based on the Quantity of Hazardous Waste Generated in a Calendar Month			
Quantity of <u>Acute Hazardous Waste</u> Generated in a Calendar Month	Quantity of <u>Non-acute Hazardous Waste</u> Generated in a Calendar Month	Quantity of <u>Residues from Clean-up of Acute Hazardous Waste</u> Generated in a Calendar Month	Generator Category
Greater than 1kg (2.2lbs)	Any amount	Any amount	Large Quantity Generator
Any Amount	Greater than or equal to 1,000kg (2,200lbs)	Any amount	Large Quantity Generator
Any Amount	Any Amount	Greater than 1,000kg (2,200lbs)	Large Quantity Generator
Less than or equal to 1kg (2.2lbs)	Greater than 100kg (220lbs) and less than 1,000kg (2,200lbs)	Less than or equal to 100kg (220lbs)	Small Quantity Generator
Less than equal to 1kg (2.2lbs)	Less than or equal to 100kg (220lbs)	Less than or equal to 100kg(220lbs)	Very Small Quantity Generator



# Container Requirements

- Containers must be:
  - Closed
    - Lid or cap should be latched closed with a good seal to meet Subpart CC
    - Ask yourself, if the container is knocked over, will it spill?
  - In good condition
    - The containers must not have any holes or damaged.
    - If it begins to leak, the contents must be promptly transferred.
  - Compatible with the material contained inside it.
  - Properly Labeled
    - Containers must be labeled “Hazardous Waste”
    - Indication of the hazards of the contents meeting USDOT/OSHA/NFPA requirements
    - Start Accumulation Date, i.e. the date the accumulation period started



# Container Requirements

- Maintain proper storage periods
  - LQG (less 90-days)
  - SQG (less than 180-day [less 270 days if TSDF is more than 200 miles away])
  - Satellite Accumulation Area (three days once 55-gallon exceeded)
- Secondary Containment (permitted CAAs)
- Weekly Inspections
  - Everything in the previous slide should be noted and detailed in your weekly inspections.
  - Weekly inspections may be used to demonstrate that the CAAs were properly maintained prior to closure (LAC 33:VII.1015.B.8).
- LDEQ recently published Container Management Guidance.
  - <https://deq.louisiana.gov/assets/docs/HazardousWaste/HW-Containers-Industry-Guidance.pdf>



# Tank Requirements

- Basic Tank Requirements
  - Labeled “Hazardous Waste”
  - Daily inspection of the tank, secondary containment and ancillary equipment
  - Storage Period
    - Tanks must be emptied (batch) or demonstrate that estimated volumes of hazardous waste (continuous flow) during the periods below.
      - Permitted Tanks (less than a year)
      - LQG (less than 90-days)
      - SQG (less than 180-days)
  - Secondary Containment in good condition, no standing water and all valves, pumps and other closed or in the manual position.
  - Air emissions are governed under Subpart BB or Title V



# Differences between SAA and CAA

- CAA's are your traditionally less than 90/180/270 waste storage areas.
  - CAAs are not permitted units.
  - Must follow the requirements for SQG/LQG container/tank/containment building/drip pad located in LAC 33:VII.1015 & 1017 (40 CFR 262.15 & 17)
- SAAs are to service an area where waste is generated under the control a single unit/operator. (LAC 33:VII.1013 / 40 CFR 261.15)
  - These area do not have a maximum storage period, however, they do have a maximum storage volume.
  - Once the storage volume is exceeded, the containers must be dated with the date the volume was exceeded and then must be transported to a CAA within three days.



# Required Notifications

- HW-1 and Updates
  - Initial notification must be submitted with 14-days of generating hazardous waste at the location
  - Updated to the HW-1 must be submitted within 7-days of any change of information on the HW-1 form.
- Closure Notifications
  - Facility and CAA Closure Notifications (LQG Only)
    - LQG facility and optional CAA closure notifications must be submitted 30-days prior to closing the facility.
  - Certification of No Hazardous Waste Activity (VQSG/SQG Only)
    - The Certification of No Hazardous Waste Activity must be submitted within 30-days of ceasing hazardous waste activities or moving to another location.



# Required Notifications

- Permit
  - Permit Renewals must be submitted at least 180-days prior to expiration of the effective permit.
- Releases and Emergencies
  - Emergency Notifications
    - Immediately, but no later than an hour after discovery.
  - Releases above Reportable Quantity
    - Promptly, within 24-hours of discovery
  - Written Notification
    - Due seven days after initial notification
  - (LAC 33:I.Chapter 39 / LAC 33.V.105.J)



# Required Reports

- Annual Reports
  - LQGs and permitted facilities are required to submit annual reports by March 1 detailing the activities of the previous calendar year.
    - Calendar year 2024, the report will be due March 1, 2025.
    - LAC 33:V.1021 and LAC 33:V.1529
      - This is more stringent than the federal requirement of biennial reports for LQGs (40 CFR 262.41) and permitted facilities (40 CFR 267.75).



# Required Reports

- Biennial Reports
  - Facilities that manage hazardous secondary materials (HSM) or are used oil processors or re-refiners must submit biennial reports for odd numbered years.
- Exception Reports
  - Generators of hazardous waste must submit an exception report if they have not received a finalized copy of the hazardous waste manifest within 45-days of the waste being accepted by the transporter
    - The report must include a legible copy of the manifest and a cover letter signed by the generator explaining the efforts taken to located the hazardous waste.



# Inspections

- Inspections have three general stages:
  - 1) Pre-inspection file review
    - The inspection team will review the facility's permit/authorizations, incident and compliance history to become familiar with the site.
  - 2) Site Visit (and follow ups needed)
    - The inspection team will have an initial meeting upon entering the site to discuss the goals of the inspection (or that day's visit).
    - The inspection team will usually conduct a walk through of the facility, inspecting all units and other areas of interest as well as operational records maintained in these areas.
    - Once the walk through is completed, the inspection team will conduct a file review of the remaining records and required reports.
    - An exit interview is conducted with facility staff. During the exit interview, the inspection team will go over initial finding and document their notes on a field interview form.
  - 3) Final Report
    - The final report will include the inspection teams findings of compliance and include the facilities responses or fixes to issues noted during the inspection.
    - The final report is published to EDMS (<https://edms.deq.Louisiana.gov>) and/or forwarded to the Enforcement Division.



# Inspections

- What to expect during a DEQ inspection?
  - An inspector will arrive to the site and meet with facility staff to discuss the goals and reason for the inspection.
  - Most inspections are unannounced.
  - The inspector will leave a field interview form (FIF) with their notes. The FIF is also a record of site visit.
  - Inspectors may conduct a partial compliance evaluation (PCE) or full compliance evaluation (FCE) depending on the reason for the site visit.
  - Everything is potentially on the table; just because it's a hazardous waste inspection, does not mean there will not be air, water or solid waste questions or issues noted.



# Inspections

- What should I do if I am inspected?
  - Be polite.
  - Ask questions!
  - Discuss the findings during the inspection and exit interview
    - We are human too! The inspector may not know of a exemption that a certain activity falls under.



# Questions?!



# Contact Info:

Daniel Cheatham

Environmental Scientist Staff (DCL-A)

Phone: 225-219-1333

Email: [Daniel.Cheatham@la.gov](mailto:Daniel.Cheatham@la.gov)

