Been Farming Long?

Protecting Their Future!!
Waste Management

- **Hazardous Waste**
  - Ignitable
  - Corrosive
  - Toxic
  - Reactive
  - Listed

- **Recyclable**
  - Metal
  - Plastic
  - Paper
  - Cardboard

- **Solid Waste**
  - Food Scraps
  - Wood
  - Glass
  - Organics
What is Hazardous Waste

It’s a Solid Waste

- In order for a waste to be a hazardous waste it must first meet the definition of a solid waste -- Here’s where I put in a four page explanation defining solid waste, we don’t have time for that. If you’re interested it can be found in 40 CFR Part 261.2!!

Hazardous Waste

In order for a solid waste to be considered hazardous it will exhibit one or more of the following characteristics:

- Ignitability
- Toxicity
- Corrosivity
- Reactivity

And/Or be considered a listed hazardous waste.
How Does This Effect Me?

- South Dakota’s hazardous waste program regulates businesses that generate, store, transport, or dispose of hazardous waste.

Four Key Requirements

- **Determination**
  - Is it a waste? Can it still be used for its intended purpose?

- **Identification**
  - Does it exhibit a hazardous characteristic? Is it a listed hazardous waste?

- **Quantification**
  - How much do I generate in a calendar month?
  - Am I required to notify of hazardous waste generation.

- **Management**
  - What do I do with it?
Determination

Is it a waste? Can it still be used for its intended purpose? Can it be repurposed?

Not This Kind!!!
So we determined that we have a waste. But is it hazardous?? How do we know??

- Product knowledge – we know gas burns, just as we know battery acid is corrosive.
- Material Safety Data Sheets (MSDS) – tells you what the product is as well as physical and chemical properties, and safety precautions.
- Outside Consultation – there are many firms available for you to hire to help you with hazardous waste.
- Department of Environment and Natural Resources Hazardous Waste Program – contact us and we can get you pointed in the right direction.
Quantification

How much hazardous waste you generate in a calendar month.

- HW Storage Logs – Keep track of the amount of waste your workers place in a storage container; e.g., record the amount of waste in a storage container at the end of each day/shift/week.

- Shipping manifests – HW manifests show the amount of waste shipped. These amounts can be used to calculate the amount generated between shipments.
Management

Depends Heavily on Generator Status

- Hazardous Waste Generated per Calendar Month

  - CESQG – Generates less than 220 pounds or less than 2.2 pounds of acute hazardous waste.
  - SQG – Generates between 220 pounds 2,200 pounds of hazardous waste.
  - LQG – Generates greater than 2,200 pounds or greater than 2.2 pounds of acute hazardous waste.
 CESQG

- Waste Determination
- Do not accumulate greater than 2,200 pounds of hazardous waste.
- Storage Containers need to be in good condition and properly closed unless being filled.
- Properly Dispose of all waste.
- Follow D.O.T. transportation regulations.
- Label used oil containers.

 SQG

- CESQG Plus
- Notify DENR of hazardous waste generation.
- Label and date all hazardous waste containers; maintain adequate aisle space.
- Limit hazardous waste storage to 180 days unless: treatment, storage, disposal facility is greater than 200 miles away, then hazardous waste may be accumulated for 270 days.
- No total accumulation of greater than 13,200 pounds.
- Manifest all hazardous waste shipments to permitted TSDF.
- Designate primary emergency coordinator.
- Post emergency information by phones.
- Provide hazardous waste handling training for employees.

Generator Status
 SQG plus….
 Prepare a written Contingency Plan that describes emergency procedures.
 Recordkeeping (training documentation) and reporting.
 Hazardous waste minimization, recycling, and disposal.
 Limit hazardous waste storage to 90 days.
 Biennial Reporting – submitted to the department by March 1\textsuperscript{st} of each even numbered year covering the previous calendar year.
 Exception reporting.
Common Wastes

- Spent Mercury-Containing Lamps
- Waste Paint-Related Materials
- Spent Lead-Acid Batteries
- Used Oil and Used Oil Filters
- Spent Parts-Washing Solvent
- Freon/Coolants
- Antifreeze
- Aerosols
- Misc....
Mercury-Containing Lamps are a hazardous waste for mercury and lead.

- New environmentally friendly “green bulbs” are not a hazardous waste.

How you are required to handle them is determined by generator status.

- CESQG can dispose of them as solid waste. Although we still encourage recycling to keep mercury and lead out of our landfills.

- SQG/LQG are required to handle them as a HW or recycle as a Universal Waste.
Waste Paint-Related Materials

- Typically Hazardous Waste!
  - Primarily consists of thinner/cleaner.
  - Often times Ignitable.
  - Includes paint waste containing heavy metals or other listed materials.
Spent Lead-Acid Batteries

- Handled as recyclable.
- Returned to supplier for core charge.
- Does not count towards company’s generator status if recycled.
- Why would you handle it any other way??
Spent Parts-Washing Solvent

- Usually classified as an ignitable waste.
- Can contain other hazardous characteristics as well (test to find out).
- Generated upon removal from service.
  - Basically once it no longer serves its intended purpose.

- Handling
  - Recycled through environmental service company.
  - Added to used oil to be burned for energy recovery.
- Regardless of handling, spent parts-washing solvent does count towards generator status.
Parts Washing Solvent

- Distillation Units
  - Cleans solvent internally.
  - Removes oil and grease from solvent.
  - Oils generated through this process are added to used oil.
  - Decreases the quantifiable amount of spent parts washing solvent.

Alternative Uses for Parts Washing Unit
**Freon**

- Recycled through on-site reclamation units.
- Environmentally friendly substitutes used when necessary.

**Antifreeze**

- Recycled
  - By far the most common management method.
  - Conducted on-site or offsite.
- May be disposed through filtration and discharge to a publicly owned treatment facility-check with local officials.
Aerosols

- Paint, lubricants, cleaners, etc....
- When empty, container disposed as solid waste.
- Some recyclers will accept aerosol containers.
  - May require them to be punctured and drained of all contents
- If punctured, residual fluid may be hazardous waste.
  - Company’s responsibility to conduct a determination on all waste streams, including aerosols.
Used Oil Problems

Given Away

- Used oil generated by a business must be tested to ensure it meets on-spec requirements prior to being given to another for burning.

Failure to Label

- Each tank used oil is stored in must be clearly labeled as "used oil".
Punctured and drained for 24-hour period.

Hot Drained

Drained via a filter crushing device.

Once drained used oil filters can be disposed as solid waste or recycled.
Miscellaneous

Could Be Anything!!

- It’s up to you to determine whether or not any and all waste generated at your site is a hazardous waste.
- And which generator status you fall into will determine your waste management options.
Common Violations

- Failure to conduct a waste determination.
- Labels and dates as required.
  - “Used Oil” label is very common.
- Storage Containers in good condition and properly closed.
- Manifests and records retention.
  - Records must be maintained on-site for a minimum of three years.
- Training requirements.
Proper Labeling

- Company Name
- Address
- Phone Number
- Unique Tracking Number
  - Will Match Manifest
- Accumulation Start Date
  - Ensures Compliance with hold Times
- Company’s Generator ID
- Waste Code
  - Characteristic or Listed.
- DOT Shipping Name
Storage

Drums in good condition

Properly labeled

Adequate aisle space
  • Allows for safe inspection of all drums to ensure compliance, and access for emergency equipment

Securely Closed
Manifest

Not required for CESQG but is a clear, simple way to maintain records of hazardous waste generated on-site.

• Will accompany each shipment of hazardous waste offsite.
• Will list each company who handles the waste, from the generator to each transporter, and finally to the designated treatment, storage, or disposal facility.
• Must be signed and dated by each company handling the waste.
Minimization and Recycling

Simply put, if you use less products that will be classified as Hazardous Waste once used, the less Hazardous Waste you produce.
Questions.....

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