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Hazardous Waste Recycling Households vs. Businesses




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Objectives

- **Purpose:** To educate the public in proper management of household hazardous waste




- **Scope:** This presentation will discuss:
 - ❖ What is a Hazardous Waste?
 - ❖ Examples of Household Hazardous Waste
 - ❖ How to manage certain Household Hazardous Wastes
 - ❖ Case Study Scenario

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What is a Hazardous Waste?

- A hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment.



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Hazardous Waste Identification Process

The Hazardous Waste Identification Process

```

    graph TD
      Q1[1. Is the material a solid waste?] -- No --> R1[The material is not subject to RCRA Subtitle C regulation]
      Q1 -- Yes --> Q2[2. Is the waste excluded from the definition of solid waste or hazardous waste?]
      Q2 -- Yes --> R1
      Q2 -- No --> Q3[3. Is the waste a listed or characteristic hazardous waste?]
      Q3 -- Yes --> R2[The waste is subject to RCRA Subtitle C regulation]
      Q3 -- No --> Q4[4. Is the waste d/dlisted?]
      Q4 -- Yes --> R2
      Q4 -- No --> R1
    
```

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Examples of Household Hazardous Waste

- Workshop and Painting Supplies
 - e.g. **adhesives, paint thinners and removers, furniture strippers**
- Lawn and Garden
 - e.g. **herbicides, wood preservatives, insecticides**
- Automotive Products
 - e.g. **automotive batteries, used oil, fuel additives**
- Household Cathode Ray Tubes (CRTs)
 - e.g. **computers, televisions, cameras, radios, microwave ovens**
- Household Mercury-Containing Devices
 - e.g. **thermometers, thermostats, electrical switches, fluorescent lamps**

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Regulatory Status for Households

- ADEM Admin. Code r. 335-14-2.01(4)(b)1. states that the following solid wastes are not hazardous wastes:
 - Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered, or reused. "Household waste" means any material derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

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ADEM Household Waste Best Management Practices

- ✓ Store waste away from any sources of flame and heat
- ✓ Use all of the product
- ✓ Give the unused portion to someone who can use it
- ✓ Donate
- ✓ Follow the label instructions
- ✓ If possible, return unused portions to the manufacturer
- ✓ Household hazardous waste collection programs
- ✓ Recycling

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ADEM Hazardous Waste from Businesses and Industries

- If you generate hazardous waste at a business or other non-household site, the management of that waste is regulated under Division 14 of ADEM's Administrative Code.

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ADEM How Much Hazardous Waste Have I Generated?

- Your generator status is based on the amount of hazardous waste you generate in one calendar month.
- Basics: 1 kilogram (kg) = 2.2 pounds (lb)
One drum = 55 Gallons = Approximately 200 kilograms = 440 pounds



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ADEM Classes of Hazardous Waste Generators

- Conditionally Exempt Small Quantity Generators (CESQGs)
- Small Quantity Generators (SQGs)
- Large Quantity Generators (LQGs)

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ADEM Generator Requirements Summary

	CESQGs	SQGs	LQGs
Monthly Generation Limits	≤100kg/month ≤1 kg/month of acute hazardous waste ≤100 kg/month of acute spill residue or soil	Between 100 - 1,000 kg/month	≥1,000 kg/month >1 kg/month of acute hazardous waste >100 kg/month of acute spill residue or soil
Hazardous Waste Determination	Required	Required	Required
Document Monthly Generation	Not required unless generation or accumulation limits exceeded	Required	Required

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ADEM Generator Requirements continued

	CESQGs	SQGs	LQGs
EPA ID Number	Not required but may obtain one if desired	Required	Required
On-Site Accumulation Quantity	≤1,000 kg ≤1 kg acute ≤100 kg of acute spill residue or soil	≤6,000 kg	No limit
Accumulation Time Limits	None	≤180 days or ≤270 days (if greater than 200 miles)	≤90 days

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ADEM Case Study Scenario

Fluorescent bulb crusher
↓
Accept fluorescent lamps from other businesses
↓
Crushed lamps from one drum weighs 500lbs (generate one drum a month)
↓
Yes; must obtain an EPA ID #



Fluorescent bulb crusher
↓
Accept fluorescent lamps from households only
↓
Crushed lamps from one drum weighs 300lbs (generate one drum a month)
↓
No; not required to notify

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ADEM Thank you!



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