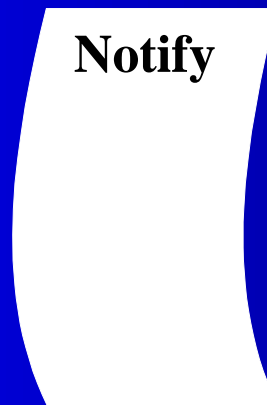
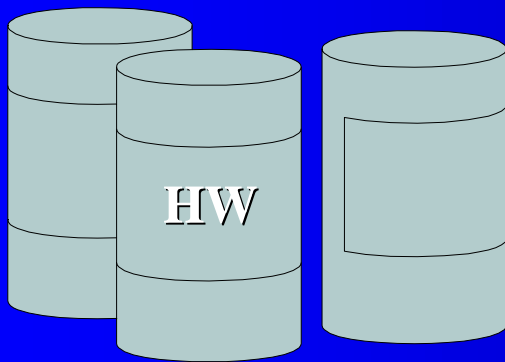
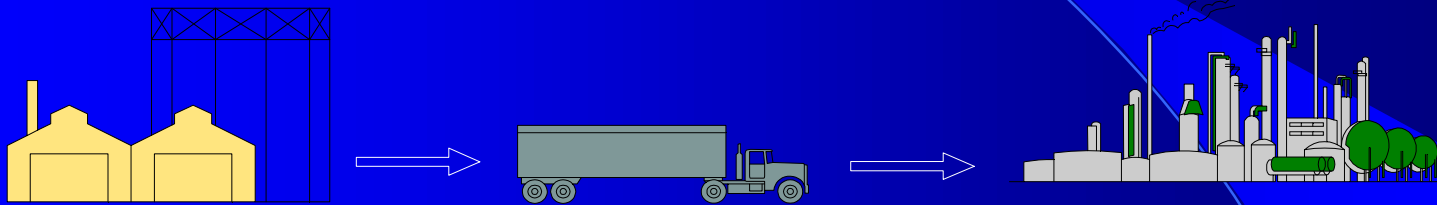


Generator Categories and Requirements



“Cradle-to-Grave” Management



Generator

Overview

- **Introduction of categories of hazardous waste generators**
- **Outline of generator administrative requirements**
- **Outline of generator on-site waste accumulation requirements**

What Is A Generator?

Under 40 CFR 260.10, a generator is “any person, by site, whose act or process produces hazardous waste identified or listed in part 261 of this chapter or whose act first causes a hazardous waste to become subject to regulation.”

Generator Categories

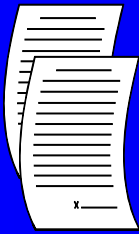
- **Conditionally exempt small quantity generators (CESQG) generate < 100 kg/month and < 1 kg of acute hazardous waste/month**
- **Small quantity generators (SQG) generate 100 to 1000 kg/month**
- **Large quantity generators (LQG) generate 1000 kg/month or more or > 1 kg of acute hazardous waste/month**

What Administrative Requirements Apply to Waste Generators?



Generator Requirements

(40 CFR 262)



- **Determine whether solid waste is hazardous**
- **Obtain an EPA identification number**
- **Have waste transported, treated, stored, and disposed of only by authorized persons**
- **Comply with manifest requirements**
- **Submit reports and retain records of hazardous waste activities**

Notification: General

- Requirements apply to SQGs and LQGs but not to CESQGs
- Hazardous waste generators must notify EPA/state of their hazardous waste generation, transportation, and TSD activities
- EPA/state issues an identification number that must be used on all documents

Manifest: A Key Element in Accountability

- **Manifests must accompany wastes on public roads**
- **Generator and authorized TSD facility must be identified**
- **Wastes must be packaged and marked to comply with DOT regulations**
- **Failure to receive completed manifest requires filing an exception report within 45 days**
- **Generators must certify that they have a waste minimization program in place**

What Substantive Management Requirements Affect Waste Generation?



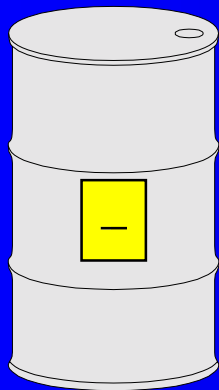
RCRA Storage Options

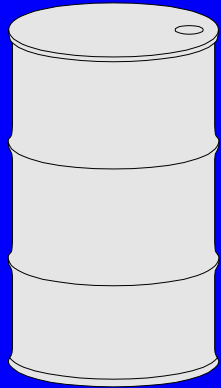
- **Accumulation at point of generation**
- **Short-term accumulation from several generation points**
- **Greater than 90-day storage in permitted units**

Impact of Generator Status on On-site Accumulation

- **CESQGs do not have to comply**
- **SQGs get longer storage time**
- **LQGs must comply with all**

Satellite Accumulation Area Requirements





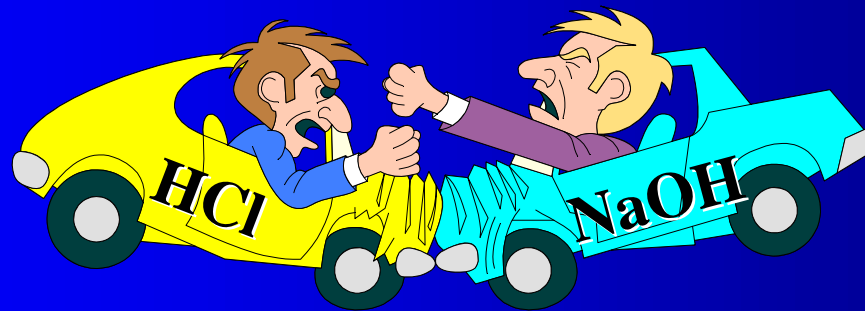
Satellite Accumulation

40 CFR 262.34(c)

- **Storage limited to 55 gallons of hazardous waste in one satellite area**
- **Storage “at or near point of generation”**
- **Storage under control of the process operator**

Satellite Accumulation (Continued)

- Chemical compatibility
- Container condition
- Containers must be closed



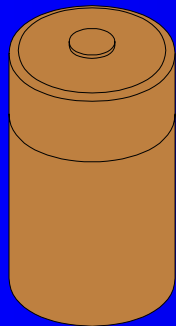
Satellite Accumulation (Cont'd)

Hazardous Waste

**Label must state
“hazardous waste”
or describe
contents of
container**

What About Small Items Such As Batteries, Which Many Facility Personnel Discard in Small Quantities?

The universal waste rule is the answer for:



- **Batteries**
- **Mercury thermostats and**
- **Recalled pesticides**

Universal Waste Managers Include:

- **Small quantity universal waste handlers**
- **Large quantity universal waste handlers**
- **Universal waste transporters**
- **Universal waste destination facilities**

Universal Waste Managers Include:

- **Small quantity universal waste handlers**
- **Large quantity universal waste handlers**
- **Universal waste transporters**
- **Universal waste destination facilities**

Universal Waste Management

- **Cannot dispose of, treat, or dilute universal waste**
- **Must prevent and respond to releases**
- **Must properly dispose of residues from universal waste management**
- **Must store no longer than 1 year**

Universal Waste Management What's The Benefit?

May accumulate universal wastes:

- **At a central location away from the point of generation**
- **Not under the control of the process operator**
- **Without meeting satellite accumulation requirements**

Mercury-Containing and Rechargeable Battery Management Act

Extends universal waste rule benefits to collection, storage, or transportation of used rechargeable batteries, whether or not a state has adopted the universal waste rule

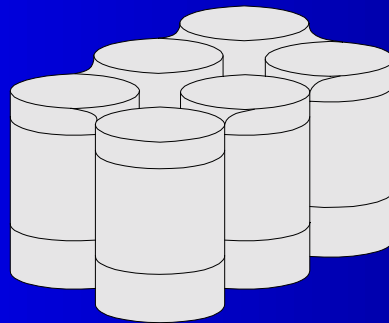
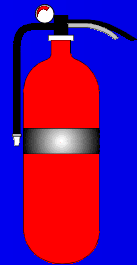
What If You Must Meet Satellite Area Requirements and Exceed 55 Gallons?

- **Mark date excess accumulation begins**
- **Transfer waste to a 90-day point or permitted facility**

Where's the 90-day point?

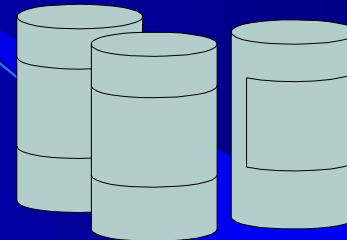


90-day Accumulation Area Requirements



90-day Accumulation Areas Include

- **Container storage areas**
- **Tanks**
- **Drip pads**
- **Containment buildings**



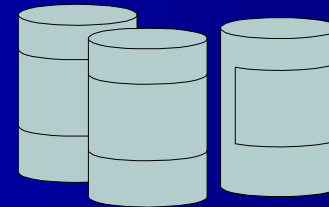
Requirements For All 90-day Accumulation

- **Closure of units meets standards in 40 CFR 265.111 and 265.114**
- **Waste labeled with the words “hazardous waste”**
- **Generator marks accumulation start date**

Requirements For All 90-day Accumulation (Cont'd)

- **Comply with certain standards for owners and operators of interim-status TSD facilities:**
 - **Emergency preparedness and prevention**
 - **Contingency planning**
 - **Training**

Container Storage

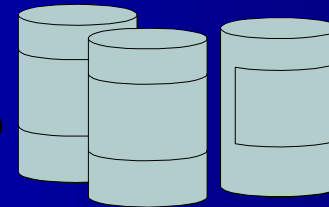


- **Comply with 40 CFR 265 Subpart I**
- **Requirements include:**
 - **Condition of container**
 - **Compatibility with container**
 - **Management of containers**
 - **Inspections**
 - **Standards for reactive/ignitable wastes**
 - **Standards for incompatible wastes**
 - **Air emission standards**

Tanks

- **Comply with 40 CFR 265 Subpart J**
- **Requirements include:**
 - **Assessment of tank systems' integrity**
 - **Design and installation standards for new tank systems**
 - **Release detection and containment**
 - **Operation to minimize spills, overfills and adequately respond if spills/leaks occur**
 - **Inspection**
 - **Standards for ignitable, reactive, and incompatible wastes**
 - **Air emission standards**

What Kind Of Air Emissions Standards?



- **Standards effective October 6, 1996 for 90-day points**
- **Process vents and leaks (Subpart AA)**
- **Equipment leaks (Subpart BB)**
- **Tanks and containers (Subpart CC)**

Treating In 90-day Accumulation Areas

- **Based on permitting exemption for “a generator accumulating waste on-site in compliance with 40 CFR 262.34. . . .”**
- **EPA states accumulation must comply with 90-day standards.**
- **For land disposal restricted waste, must have waste analysis plan.**



Applicability of Generator Standards to Recycling

Applicability To Recycling

- **RCRA storage requirements apply to hazardous wastes that are recycled**
- **Such wastes might include waste:**
 - applied to the land
 - burned for energy recovery
 - processed to obtain a usable product
 - speculatively accumulated

What If Storage Exceeds the Time Limit?

If the storage exceeds the 90-day limit, the storage must be authorized by a RCRA permit or storage extension.

Generators in Summary

- ✓ **Generator standards depend on hazardous waste generation rates**
- ✓ **Large quantity generators have two storage options, other than permitting their facilities**
- ✓ **Specific requirements are imposed for storage that is exempt from permitting**
- ✓ **Deficiencies in meeting these on-site storage requirements are a common source of federal facility enforcement actions**