

# Hazardous Waste Management

- General Overview
- Hazardous Waste Identification
  - Generator Status
  - Universal Waste
  - Special Wastes

# Facilities Regulated Under Hazardous Waste Rules

- Hazardous wastes are solid wastes that have certain special qualities.
- First you need to determine if you generate or manage solid waste.
- Solid wastes are any discarded (abandoned, recycled or considerate waste-like) materials.
- Solid wastes can be solid, liquid, semi-solid, or containerized gas.

# Do You Generate Hazardous Waste?

- Your Waste is hazardous if it is a solid waste and it is either:
  - Characteristic, or
  - Listed in 6NYCRR 371.4

# Characteristic Hazardous Waste

- Ignitable
- Corrosive
- Reactive
- Toxic

# Characteristic Hazardous Waste

- Ignitable – Flash point less than 140° F

Examples: gasoline, some paints and solvents

# Characteristic Hazardous Waste

- Corrosive – pH less than or equal to 2 or greater than or equal to 12.5

Examples: battery acid, rust removers, some cleaners.

# Characteristic Hazardous Waste

- Reactive - Unstable and explodes or produces toxic fumes, gases and vapors when exposed to air or water or under other conditions such as heat and pressure.

Examples are certain lab wastes such as:

- Picric acid
- Ethyl ether
- Certain cyanides
- Sulfide-bearing wastes

# Characteristic Hazardous Waste

- Toxic - Fails the Toxicity Characteristic Leaching Procedure (TCLP); leaches toxic chemicals into the soil or groundwater when disposed on land.
- Examples are wastes containing high concentrations of heavy metals such as:
  - Batteries
  - Waste water treatment sludges

# Listed Hazardous Wastes

- Non-specific source waste: Material-specific wastes, commonly produced by a wide variety (non-specific sources) of manufacturing and industrial processes.

Examples include:

- Solvent wastes
- Electroplating wastes
- Metal heat-treating wastes

# Listed Hazardous Wastes

- F List: Wastes from non-specific sources

Examples are:

- Spent solvent wastes
- Electroplating or other metal finishing wastes
- Dioxin-bearing wastes
- Petroleum refinery wastewater treatment sludges

# Listed Hazardous Waste

- Specific source waste from specific industries.

## Examples:

- Wood preserving
- Petroleum refining
- Organic chemical manufacturing

# Listed Hazardous Waste

- K wastes: Wastes from specific sources.

Examples include:

- Organic and inorganic chemicals manufacturing
- Wood preservation
- Inorganic pigment manufacturing
- Pesticides manufacturing

# Listed Hazardous Waste

- Discarded commercial chemical products and manufacturing chemical intermediates.

Examples include:

- Off-spec products
- Container residuals
- Spill residue runoff
- Active ingredients that have spilled or are unused and intended to be discarded

# Listed Hazardous Waste

- P list: Acute wastes listed in 371.4(d)(5)
- U list: Toxic wastes listed in 371.4(d)(6)

# Listed Hazardous Wastes

- B list: Wastes containing PCBs >50 ppm
- PCBs > 50 ppm are regulated as a hazardous waste in New York State.
- The USEPA does not regulate these wastes under RCRA. However, EPA regulates them at >50 ppm under TSCA.

# What's Your Regulatory Status?

- Your category is decided by how much you generate or store.
- Three categories of hazardous waste generator:
  - Conditionally Exempt Small Quantity Generator
  - Small Quantity Generator
  - Generator

# What's Your Regulatory Status?

- TSDF (Treatment, Storage and Disposal Facility)
- Stores haz waste greater than 90 days, haz waste is received from off-site and is not beneficially reused, reused, or legitimately recycled, haz waste is treated on-site in non-exempt units, or haz waste is disposed on-site

# Conditionally Exempt Small Quantity Generator (CESQG)

- Generates < 100 kilograms (220 pounds)/month of non-acute hazardous waste
- Generates < 1 kg (2.2 lb) of acute hazardous waste
- Stores < 1000 kg non-acute hazardous waste
- Stores < 1kg acute hazardous waste

# Requirements for CESQGs

- Lowest Level of Requirements
- Waste identification
- Waste Disposal at authorized facility
- Waste transportation by authorized hauler

# Small Quantity Generators (SQGs)

- Generate 100 - 1000 kg (220 - 2200 lb)/month non-acute hazardous waste
- Accumulate < 6000 kg (13,200 lb) non-acute hazardous waste on-site

# Requirements for SQGs

- Accumulation limits
- Storage requirements
- Emergency Preparedness and Response Plan
- EPA ID Number Call EPA phone (212)-637-4106

# Requirements for SQGs

- Manifest requirements
- Use licensed transporter
- Use authorized TSDFs
- Pre-arranged waste disposal
- Land disposal restrictions

# Generators

- Generates > 1000 kg (2200 lb)/month non-acute hazardous waste
- Generates > 1 kg (2.2 lb)/ month acute hazardous waste
- Stores full containers of hazardous waste < 90 days
- Exempt from 6NYCRR Part 373 permitting.

# Requirements for Generators

- Must meet all requirements for SQGs plus:
- Annual Report of hazardous waste generation;
- Train and document titles and training of staff who manage hazardous waste;
- Preparedness and prevention requirements; and

# Requirements for Generators

- Prepare and annually update Contingency Plan for hazardous waste emergencies
- In emergency situations, implement Contingency Plan, notify DEC Commissioner in writing, when facility is safe to operate, and send written report to DEC.