Generator Classifications

- **Conditionally Exempt Small Quantity Generator**
  - Each month generates less than 220 pounds of hazardous waste and less than 2.2 pounds of acute hazardous waste
  - Never stores more than 2,200 pounds of hazardous waste or 2.2 pounds of acute hazardous waste

- **Small Quantity Generator**
  - In any month generates between 220 and 2,200 pounds of hazardous waste and less than 2.2 pounds of acute hazardous waste
  - Stores up to 13,200 pounds of hazardous waste and less than 2.2 pounds of acute hazardous waste

- **Large Quantity Generator**
  - In any month generates more than 2,200 pounds of hazardous waste or more than 2.2 pounds acute hazardous waste
  - Stores more than 13,200 pounds of hazardous waste or more than 2.2 pounds of acute hazardous waste
What Counts toward your Generator Status:

- Hazardous waste pharmaceuticals (Characteristic or U & P Listed)
- Wastes generated in on-site outpatient clinics or histology labs
- "P" Listed inner packaging
- Other Hazardous Wastes generated within the hospital

What Doesn’t Count toward your Generator Status:

- Non-hazardous waste pharmaceuticals (all others)
- RCRA Empty containers other than “P” listed drugs
- Pharmaceuticals returned for credit through “reverse distribution”
- Non-Hazardous Chemo drugs (if segregated)
- Universal Waste
HW Chemo vs Trace Chemo
Black box or yellow bag
HW Chemo vs Trace Chemo
Black box or yellow bag

- The term “bulk chemotherapy” is not a regulatory term but is used to differentiate chemotherapy containers that are not “RCRA empty.”
- Partial bottles of chemo agents which are not needed to complete a dosage.
- IV bags that go unused or are only partially emptied.
- Empty bottles of P-Listed chemo pharmaceuticals
- Non-RCRA “bulk Chemo that the facility chooses to dispose of as Hazardous Waste
HW Chemo vs Trace Chemo
Black box or yellow bag

- All chemotherapy paraphernalia should be managed as **trace** chemotherapy waste if there has been the potential for exposure to chemotherapy contamination. Items that are appropriate for management as trace chemotherapy waste include:
  - “RCRA empty” vials, syringes, IV bags, and tubing;
  - Gowns, gloves, wipes and other paraphernalia associated with routine handling, preparation, and administration of chemotherapy; and,
  - Wipes and other materials used during routine cleaning and decontamination of a Biological Safety Cabinet or glove box (unless alcohols, phenols or other hazardous materials are used).
HW Chemo vs Trace Chemo
Black box or yellow bag
Storage Time Limits

- CESQG can store waste indefinitely.
  - If onsite HW reaches 2,200 pounds facility becomes an SQG.
  - If onsite HW of P-waste reaches 2.2 lbs facility becomes a LQG
- SQG’s can store waste for up to 180 days.
- LQG’s can store waste for up to 90 days.
Container Management
Satellite Accumulation Areas

- “At or Near” the point of Generation and under the control of the operator.
- Containers must be kept closed except when filling or emptying.
- Must be marked with the words “Hazardous Waste” or other words that describe the waste.
Where Might Satellite Accumulation Areas be Located?

- Pharmacy/Satellites
- Patient Care Units
- Emergency Room/Operating Room
- Intensive Care Unit (ICU)
- Oncology/Hematology
- Other Outpatient Clinics
- Long Term Care Facilities
Satellite Accumulation Containers
- Sept 2008 Position Paper in CAV packet
Container Management
<90 or <180 Day Storage Areas

- Must be marked with the words “Hazardous Waste” and Accumulation Start Date.
- Containers must be kept closed except when filling or emptying.
- Adequate Aisle Space.
- Managed to prevent a rupture or leak.
- Access to emergency equipment and communications or an alarm system.
HW Accumulation Areas
Inspections

- SQG’s
  - Weekly for hazardous waste storage containers
  - Daily/weekly for hazardous waste storage tanks
  - Log recommended but not required

- LQG’s
  - Weekly for hazardous waste storage containers
  - Daily/bimonthly/yearly for hazardous waste storage tanks
  - Log required
Hazardous Waste Training

- SQG’s
  - Basic waste handling familiarization & emergency procedures
  - Documentation not required but recommended

- LQG’s
  - Full training
  - Initial & Annual refresher
  - Documentation required
Hazardous Waste Manifest

- SQG’s & LQG’s required to ship waste using hazardous waste manifest form.
- Must keep copies for 3 years.
Hazardous Waste Manifest

Different from RMW Tracking Sheet

- 5 part form, hold on to initial copy and wait for copy to be mailed to you.
- Should get copy mailed back from TSDF (Treatment Storage or Disposal Facility) within 35 days. - “Cradle to Grave”
- Person signing the manifest is certifying that the materials shipped match the manifest. - Discrepancy Report
Biennial Report

- LQG’s required to submit a report every two years summarizing waste shipments such as waste types, quantities, transporter and TSDF facilities utilized.
Contingency Plan

- SQG’s - Basic plan
  - By the phone: Emergency Coordinator name & telephone #, fire department telephone #,
  - Post location of fire extinguishers & alarm & spill equipment.
Contingency Plan

- LQG’s - Full Plan
  - Actions & Roles of Staff and Emergency Personnel in case of Emergency
  - Agreements with Local Authorities (Fire, Police)
  - Names and phone #s of Emergency Coordinators
  - Location & Capabilities of Spill & Emergency Equipment.
  - Evacuation Procedures Signals & Routes
Preparedness & Prevention

- Familiarize fire, police, hospital with wastes generated and potential hazards

- Have emergency response contractor agreement.
Picking a TSDF – You are in Control

- You are Ultimately Responsible for Any Waste You Generate (Joint & Several Liability)
- Ask about disposal methods (Incineration, Treatment, Bulking…)
- Certificate of Destruction - Not worth much, but maybe better than nothing.
What other hazardous wastes are generated in your hospital?

- Solvents generated in histology labs (F003, D001).
- Formaldehyde used in morgues (U122).
- Crushed fluorescent bulbs from maintenance (D011).
What other regulated wastes are generated in your hospital?

- Used oils - container must be marked “Used Oil”, not regulated as haz-waste if destined for recycling.
- Universal Wastes - Batteries, Light Bulbs, Mercury Containing Equipment (& in NJ Electronics), must be marked UW, packaged to prevent breakage & shipped at least once a year.
- RMW - Red Bag Waste
Universal Waste
Batteries - Containers everywhere
Bulbs – Where do I put them all?
Top 5 RCRA Tips for Hospitals:

1) Visit your <90/<180 day storage area the day before your next pickup.
   - Check for aisle space, access to com. or alarm system, spill equip.
   - Make sure all containers are labeled & dated (<90 or 180 days?)
   - Make sure all containers are closed.
   - Weekly inspections?

2) Make sure Universal Waste is being properly managed.
   - Bulbs - labeled? Safe from breaking? bulb crusher = HW & Air permit
   - Batteries - buckets, buckets, everywhere – labeled? closed?
   - Computers/Electronics/TVs - labeled? protected from breakage?
   - All - Shipped at least once a year? Paperwork?, Training?
Top 5 RCRA Tips for Hospitals:

3) Make sure true HW chemo waste isn’t being disposed of as RMW
   - Mixture rule (any mixture of a listed hw & a solid waste is HW
   - Bulk vs Trace really equals Contaminated vs Not Contaminated
   - RCRA Empty = <3% by weight & emptied by all normal means

4) Make sure your Satellite Accumulation Containers are;
   - Closed
   - Labeled
   - At or Near the “point of generation”
   - How many do you have & where?

5) Visit the “other places” that generate HW in the hospital
   - The Lab - Xylenes used as tissue fixatives
   - The Morgue - Formaldehyde & Formalin
   - The Chemo outpatient areas (See #3 above)
Additional Resources

NIOSH Hazardous Drug Alert
www.cdc.gov/niosh/docs/2004-165/#sum

OSHA Technical Manual
http://www.osha.gov/dts/osta/otm/otm_vi/otm_vi_2.html#app_vi:2_1

Pharmaceutical waste webpage:
www.h2e-online.org/hazmat/pharma.html

Healthcare Education Resource Center (HERC)
Blueprint on Pharmaceutical Waste Management (Revised)
www.hercenter.org/hazmat/tenstepblueprint.pdf

NJDEP Hazardous Waste Enforcement’s Compliance Assistance Page
http://www.nj.gov/dep/enforcement/ca-intro.html