



Title: <b>Chemical Hazardous Waste Management</b>			
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**PURPOSE:** To establish procedures for ensuring that chemical hazardous wastes are handled, packaged, collected, treated and disposed of in accordance with applicable regulations.

**SCOPE:** Hospital wide.

**DEFINITIONS:**

**Controlled Drugs:** Drugs that are controlled by the Drug Enforcement Agency (DEA) and require special handling.

**Generator of Waste:** Person or department that produces hazardous waste.

**Hazardous Waste:** Waste that meets one of the following:

- Listed in 6 NYCRR Part 371.4.
- Displays any hazardous characteristic. Generally the characteristics are defined as:
  - Ignitability: Liquid with a flash point less than 140° F or 60° C.
  - Corrosivity: Defined at the Hospital as waste that has a pH of less than or equal to 5 or greater than or equal to 12.5.
  - Reactivity: Normally unstable.
  - Toxicity: If a sample is tested using the Toxicity Characteristic Leaching Procedure contains any of the contaminated concentrations listed in Table 1, Part 371.3(e) or has an LD oral toxicity for rats of less than 100 mg/kg.

**Hazardous Waste Manager:** Anyone who stores waste, processes it, reclaims waste, or disposes of waste.

**Manifest:** The hazardous waste manifest is required by the NYSDEC to accompany all shipments of hazardous waste.

**Mixture Rule:** When a listed hazardous waste is mixed with any material, the resulting waste stream is also a hazardous waste.

**PROCEDURES:****I. Responsibilities****A. Environmental Health and Safety (EH&S) shall:**

1. Coordinate the hazardous waste management program and procedures.
2. Provide hazardous waste training programs for employees that handle or manage hazardous waste.
3. Provide technical assistance and support.
4. Collect and dispose chemical hazardous waste.

**B. Hazardous Waste Generating Departments shall:**

1. Properly identify, segregate, handle, label, and store waste. Waste determinations must be completed for all chemical waste. Refer to EH&S Policy 8-7, Waste Determination.
2. Ensure that all waste packaging, handling, and storage containers are free from contamination and physical hazards prior to removal from the work area.
3. Segregate waste streams for proper waste disposal.
4. Inspect their Satellite Accumulation Areas (SAA) daily to ensure waste is stored properly.

**C. Pharmacy shall:**

1. Manage the disposal of controlled drugs according to current regulations.
2. Manage the unused pharmaceutical drug program through Guaranteed Returns.

**II. General Information**

- A. Only trained staff shall manage chemical hazardous waste.
- B. New employees may not manage or handle hazardous waste unless supervised. Employees will receive training in the management and handling of hazardous within six months of commencing work with hazardous waste.
- C. Departments may not neutralize or dilute solutions to meet criteria for sink disposal.

- D. Do not mix general waste with hazardous wastes or package general waste in hazardous waste containers.
- E. No hazardous wastes may be dumped down a drain, discharged to sanitary sewer, discarded with regular trash, or allowed to evaporate to atmosphere.

**III. Training** - Hazardous Waste Training is available at <http://www.stonybrook.edu/ehs/waste/training.shtml> Training is required if an employee has the responsibility to:

- 1. Determine what is a hazardous waste,
- 2. Add hazardous waste into accumulation containers,
- 3. Transport hazardous waste from accumulation point,
- 4. Inspect hazardous waste storage areas, or
- 5. Respond to spills involving hazardous wastes.

**IV. Waste Minimization**

In order to reduce waste considers the following techniques:

- A. Source Reduction - substitute less hazardous products in procedures in order to reduce the amount or eliminate specifically hazardous waste.
- B. Recycling - some waste can be recycled. Recovery systems are available for xylene, alcohol, and formalin. Contact EH&S for information on increasing recycling.
- C. Inventory Management - each location using any chemicals or drugs is required to maintain an inventory. Proper inventory control can reduce over purchasing, monitor expiration dates, and increase chemical storage safety.

**V. Waste Segregation** - Waste streams at the Hospital are classified into six major categories:

- 1. Solid Waste.
- 2. Regulated Medical Waste
- 3. Hazardous Waste
- 4. Radioactive Waste
- 5. Universal waste
- 6. Recyclables and reusables.

**VI. Satellite Accumulation Storage Areas**

- A. The Satellite Accumulation Area is a hazardous waste storage area at or near the point of generation and under the control of the waste generator. No more than 55-gallons of a hazardous waste or one quart of acutely hazardous waste P-listed waste can be accumulated in a single location.

- B. Each container must be labeled with the Hospital Hazardous Waste Labels (available from EH&S). The name of the waste (no abbreviations, no chemical formulas) must be included on the label. If the waste is a mixture, identify the chemical waste constituents by proper chemical name including any deactivators/disinfectants used and the approximate quantity or concentration.
- C. SAA must be inspected daily by the generator to ensure that containers are closed and labeled correctly.

#### **VII. 90-day Storage Area**

- A. Areas in the hospital where waste is allowed to be collected for up to 90 days.
- B. These areas must be inspected weekly by EH&S.

#### **VIII. Containers and Packaging:**

- A. Hazardous Waste Containers must be in good condition, compatible with the waste stored therein, and are not in danger of leaking.
- B. Hazardous Waste containers must be closed at all times during storage, except when waste is being added. Funnels should not remain in waste containers after filling.
- C. Waste Chemicals stored in containers of one gallon or larger size shall be break-resistant whenever possible.
- D. Hazardous waste must never be left on the loading docks, freight elevator lobbies, hallways or any other unrestricted locations.
- E. Secondary Containment is required for containers of liquid waste under the following circumstances:
  - 1. When waste is stored in 55-gallon drums
  - 2. When the waste is stored on the floor.
  - 3. When the waste is stored in a fume hood that has a drain.
  - 4. When the waste is stored within four (4) feet of sink
  - 5. When necessary to separate incompatibles or high hazard wastes.

#### **IX. Manifests**

The generator must complete an EH&S Chemical Waste Disposal Manifest before any hazardous waste is collected. The identification of the chemicals on the manifest must match those on the Hazardous Waste Disposal labels on the waste containers. The number of containers and the size of the containers must also be listed. The size of the container, not the amount in the container, should be listed on the manifest.

**X. Empty Containers**

- A. Empty containers that contain less than 1” of product can be disposed of in the trash. Write “EMPTY” over the original label before disposing.
- B. If a container held a P-listed hazardous waste, the container must be disposed of as hazardous waste or triple rinsed before disposal. Rinsate must be collected and disposed of as hazardous waste.

**XI. Unknown Chemicals or Contaminated Equipment.** Contact EH&S at 4-6783 for assistance.**INQUIRIES/REQUESTS:**

Environmental Health and Safety  
HSC L1, 059  
Zip =8017  
Main Office: 444-6783  
Fax: 444-6845

**RELATED FORMS:****RELATED DOCUMENTS:**

Hazardous Materials Spill Plan, Policy 2-6  
University Hospital Radiation Safety Committee Policies and Procedures for Use of Ionizing Radiation, Policy 6-1  
Asbestos Management, Policy 8-3  
Regulated Medical Waste Management, Policy 8-4  
Hazardous Drugs Management, Policy 8-5  
Hazardous Waste Determination, Policy 8-7  
Universal Waste Management, Policy 8-9  
Mercury Management, Policy 8-11  
6 NYCRR Subchapter B New York State Department of Environmental Conservation Solid Waste