Hazardous Chemical Waste Management

Chemical waste is considered hazardous if it appears on one of the lists of hazardous wastes found in Federal or State regulations or exhibits one or more of the following hazardous waste characteristics:

- **Ignitable** - Liquids with a flash point below 140^{o} F; or non-liquids which cause fire, and burn vigorously and persistently
- **Corrosive** - Aqueous solutions with a pH less than or equal to 2 or greater than or equal to 12.5
- **Reactive** - Normally unstable and undergoes violent change without detonating; reacts violently with water; forms potentially explosive mixtures with water; produces toxic gases when mixed with water; capable of detonation or explosion
- **Toxic** – When subjected to a leaching procedure, this waste produces one or more of 39 constituents that pose an environmental hazard (Federal EPA Waste Codes D004-D043)

<u>NEVER</u> DISPOSE OF HAZARDOUS WASTE DOWN THE DRAIN!

Storage:

- **ALWAYS** mark each container with the words “Hazardous Waste” using a hazardous waste label (see below).
- **STORE** waste in **LEAK-PROOF**, **COMPATIBLE** containers which are in **GOOD CONDITION**.
- Provide enough storage space for **EASY ACCESS** and **VISIBILITY.**
- **NEVER** accumulate more than 55 gallons of hazardous waste or more than 1 quart acutely hazardous waste.
- Keep containers **CLOSED** except when filling.
- **NEVER** mix reactive or incompatible wastes in the same container.
- **NEVER** store containers near sink or floor drains.
- Provide **SECONDARY CONTAINMENT** for all liquid hazardous chemical waste storage containers.
- **INSPECT** containers for leaks or corrosion weekly.

Labels:

- Place an orange **HAZARDOUS WASTE LABEL** on each waste container:

STATE UNIVERSITY OF NEW YORK AT STONY BROOK
HAZARDOUS WASTE for DISPOSAL
INSTRUCTIONS:
1. SEGREGATE CHEMICALS FOR DISPOSAL BY HAZARD CATEGORY.
2. **COMPLETE AND AFFIX THIS LABEL TO EACH CONTAINER.**
3. SAFELY TRANSPORT CHEMICAL WASTE TO CHEMICAL COLLECTION SITE.
4. CONTACT EH&S IF THERE ARE ANY QUESTIONS: **2-6410**

Name	Date	Department	Location	Telephone
Name(s) of Hazardous Waste				

MATERIAL	FORM	HAZARD	
☐ CHEMICAL	☐ SOLID	☐ IRRITANT	☐ POISON (TOXIC)
☐ SOLVENT	☐ LIQUID	☐ AIR REACTIVE	☐ OXIDIZER
☐ BIOLOGICAL SUBSTANCE	☐ GAS	☐ WATER REACTIVE	☐ EXPLOSIVE
☐ DRUG SUBSTANCE	☐ Other (specify)	☐ FLAMMABLE	☐ Other (specify)
☐ Other _____	_____	☐ CORROSIVE	☐ _____

☐ **Material Must Be Refrigerated. EH&S STORAGE DATE _____.**
1M 10/01

- **DO NOT USE** abbreviations or formulas in place of the full **CHEMICAL NAME(S)**. For example, fully write out “Hydrochloric Acid”, not “HCL” and/or fully write out “Methanol”, not “MEOH”.
- If the **WASTE IS A MIXTURE**, identify all chemical waste constituents by proper chemical name, including any deactivators/disinfectants used and approximate quantity or concentration.
- List **MATERIAL TYPE, FORM**, and **HAZARD(S)** of waste (Ignitable, Corrosive, Reactive or Toxic) on label.
- For waste chemicals in their **ORIGINAL CONTAINERS**, a **1” X 2” FLUORESCENT GREEN “***HAZARDOUS WASTE”* label may be used in addition to the container’s original label (Do not cover original label).

Internal Hazardous Waste Manifests:

- A **CHEMICAL WASTE MANIFEST** must be **COMPLETELY FILLED** out **EVERY TIME** chemical waste is picked up.
- The **IDENTIFICATION** of the chemicals on the manifest **MUST MATCH** those on the **HAZARDOUS WASTE LABEL(S)** placed on the chemical waste container(s).
- The **NUMBER** of containers and the **SIZE** of the containers (not the amount in the container) must also be listed on the waste manifest.
- When your container is **FULL**, bring it to your designated hazardous waste collection area to have the **WASTE PICKED UP.** Visit our website at http://www.stonybrook.edu/ehs/waste/collection to view the Hazardous Waste Collection Calendar and pickup locations.
- Retain a copy of the manifest for your records. Below is an example of an EH&S Chemical Waste Disposal Manifest.

SUNY at STONY BROOK **CHEMICAL WASTE DISPOSAL MANIFEST**

Generating Department	Principal Investigator	Grant Number
Building	Room Number	Date
Generating Department: Print Name: Signature:		Telephone Number

INSTRUCTIONS: Fill in all information (except shaded area), and affix a completed Waste Disposal Label to each container. Generating Department should retain pink copy.
NOTE: Chemical Waste is charged on the basis of container size.

RETURN TO: **ENVIRONMENTAL HEALTH & SAFETY**
110 SUFFOLK HALL
WASTE MANAGEMENT COORDINATOR
ZIP: 6200
PHONE: 632-6410

Chemical Name	Quantity (# of Units)	Container Size	Gallon Equivalent

DISTRIBUTION: White - Environmental Health & Safety Pink - Generating Department

Unknown Waste:

- All waste **MUST BE IDENTIFIED** before requesting a waste pick-up.
- Identify and **LABEL** the waste as hazardous or non-hazardous. (Use **WORKSHEET** provided in the EH&S Hazardous Waste Policy 8.1 - Appendix 3, "Identifying Unknown Waste").
- If the waste **CANNOT BE IDENTIFIED** by the Generator, contact EH&S for additional information on how to make a proper hazardous waste determination.

Note: Labels for hazardous waste containers and chemical waste manifests are available from the Department of EH&S (2-6410).

Training:

- Hazardous Waste Management Training is **required** if you **generate, manage or otherwise handle hazardous chemical waste**. The EH&S Department offers both live and online training throughout the year. Please visit our website at http://www.stonybrook.edu/ehs/training/ to determine when a course is available and which training(s) would apply to you.

CHEMICAL SPILL RESPONSE PROCEDURES

REMEMBER: FIRST AID FIRST, THEN ASSESS THE SPILL – Is the Spill Minor or Major?

Minor Spill - Definition

Less than 1 gallon of a low toxicity chemical or spill involving the following:

- Less than 20 cc/ml of a highly hazardous chemical (carcinogen, reproductive hazard, or has NFPA/HMIS health rating of 3 or 4) such as formaldehyde or a hazardous drug (mitomycin, cyclophosphamide)
- Blood and/or body fluids

Major Spill - Definition

More than 1 gallon of a low toxicity chemical or any spill involving the following:

- More than 20 cc/ml of a highly hazardous chemical (carcinogen, reproductive hazard, or has NFPA/HMIS health rating of 3 or 4) such as formaldehyde or a hazardous drug (mitomycin, cyclophosphamide)
- Unknown chemical or product

Minor Spill Response

1. Notify fellow workers in vicinity of spill.
2. Secure area by restricting access and posting signs.
3. Remove any potential ignition sources and unplug nearby electrical equipment.
4. Gather and review safety information on spilled chemical. Review chemical's Material Safety Data Sheet (MSDS) for a hazard assessment and other pertinent information.
5. Locate an appropriate Spill Kit, if available.
6. Don appropriate personal protective equipment (PPE) which usually includes chemical splash goggles, gloves, apron or lab coat. If high splash potential exists, also wear a face shield and protective clothing.
7. Confine and contain spill. Cover spill with appropriate absorbent material. Neutralize acid and base spills prior to cleanup.
8. Clean up spill using a scoop or other suitable item and place material in appropriate disposal container.
9. Decontaminate spill surface with mild detergent and water, as appropriate. Carefully remove PPE, place non-reusable items in disposal container and thoroughly wash hands.
10. Complete a hazardous waste label and affix label to container.
11. Contact EH&S at 2-6410 to arrange for a waste pickup or bring your spill debris to the pre-scheduled waste pickup location designated for your building.
12. Investigate cause of spill and review with EH&S. Document spill, response and follow-up with staff.
13. Replenish spill kit, as necessary.

Major Spill Response

1. Notify fellow workers and evacuate to a safe area. Post warning signs whenever possible**.**
2. **DO NOT ATTEMPT TO CLEAN A MAJOR SPILL!**
3. If spill poses a fire hazard, activate nearest fire alarm. Call University Police at 911 (cell: 631-632-3333) and give details of spill including specific location, chemical, quantity, and if anyone is injured.
4. In case of an injury or chemical contamination:
   a. Wear PPE and move victim from spill area.
   b. Locate nearest emergency safety shower or eyewash. Remove contaminated clothing and flush affected areas with copious amounts of water for 15 minutes.
   c. If first aid trained, administer first aid as appropriate. Assist person to Employee Health or Emergency Department (after hours) for treatment. If possible, bring chemical label or MSDS.
5. University Police will contact EH&S and either EH&S staff or outside personnel will respond to the spill.
6. Staff knowledgeable about the spill should provide responders with all pertinent information and MSDS.
7. The responders or designee will inform staff when it is safe to re-enter spill area.
8. Investigate cause of spill. Document spill, response and follow-up with staff and contact EH&S at 2-6410.

For further information contact:

Department of Environmental Health & Safety
Stony Brook University
110 Suffolk Hall
Stony Brook, NY 11794-6200
Phone: 631-632-6410
FAX: 631-632-9683
www.stonybrook.edu/ehs

Hazardous Waste Collection Calendar

Location	Day of month	Time
Grad Physics (Physics) at the loading dock	First Tuesday	10:00 - 10:30AM
Earth & Space Sciences (ESS) at the loading dock	Second Tuesday	10:00 - 10:30AM
Incubator (LIHTI) at the side door	Third Tuesday	10:00 - 10:30AM
Engineering (ENG) at Material Sciences dock	Fourth Tuesday	10:00 - 10:30PM
Life Sciences Building (LSB) at the loading dock	Every Tuesday	1:00 - 1:30PM
Grad Chemistry (GC) at the loading dock	Every Wednesday	10:00 - 10:30AM
Health Science Center (HSC) by the freight elevator	First Thursday	17th Floor 1:15 - 1:45PM 15th Floor 2:00 - 2:30PM
Psychology A (Psych A) at the loading dock	Third Thursday	10:00 – 10:30 AM
School of Marine and Atmospheric Sciences (SoMAS) @ Dana Hall	Fourth Thursday at Dana Formalin Transfer Room	10:00 – 10:30 AM
School of Marine and Atmospheric Sciences (SoMAS) @ Challenger	Fourth Thursday at Challenger South East Exit Door (Near Room 123)	10:45 – 11:15 AM

STONY BROOK UNIVERSITY