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°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)

NEVER 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:

![Hazardous Waste Label](image)

- **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.

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**SUNY at STONY BROOK**

**CHEMICAL WASTE DISPOSAL MANIFEST**

<table>
<thead>
<tr>
<th>Generating Department</th>
<th>Principal Investigator</th>
<th>Grant Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Building</th>
<th>Room Number</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Generating Department:</th>
<th>Print Name:</th>
<th>Signature:</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Quantity (# of Units)</th>
<th>Container Size</th>
<th>Gallon Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

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

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**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.

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For further information, contact the 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
### CHEMICAL SPILL RESPONSE PROCEDURES

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

<table>
<thead>
<tr>
<th><strong>Minor Spill - Definition</strong></th>
<th><strong>Major Spill - Definition</strong></th>
</tr>
</thead>
</table>
| 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 | 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 |

<table>
<thead>
<tr>
<th><strong>Minor Spill Response</strong></th>
<th><strong>Major Spill Response</strong></th>
</tr>
</thead>
</table>
| 1. Notify fellow workers in vicinity of spill. | 1. Notify fellow workers and evacuate to a safe area.  
Post warning signs whenever possible. |
| 2. Secure area by restricting access and posting signs. | 2. **DO NOT ATTEMPT TO CLEAN A MAJOR SPILL!** |
| 3. Remove any potential ignition sources and unplug nearby electrical equipment. | 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. Gather and review safety information on spilled chemical. Review chemical's Material Safety Data Sheet (MSDS) for a hazard assessment and other pertinent information. | 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. Locate an appropriate Spill Kit, if available. | 5. University Police will contact EH&S and either EH&S staff or outside personnel will respond to the spill. |
| 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. | 6. Staff knowledgeable about the spill should provide responders with all pertinent information and MSDS. |
| 7. Confine and contain spill. Cover spill with appropriate absorbent material. Neutralize acid and base spills prior to cleanup. | 7. The responders or designee will inform staff when it is safe to re-enter spill area. |
| 8. Clean up spill using a scoop or other suitable item and place material in appropriate disposal container. | 8. Investigate cause of spill. Document spill, response and follow-up with staff and contact EH&S at 2-6410. |
| 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. | **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 |
| 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.  
13. Replenish spill kit, as necessary. |
### Hazardous Waste Collection Calendar

<table>
<thead>
<tr>
<th>Location</th>
<th>Day of month</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grad Physics (Physics)</strong> at the loading dock</td>
<td>First Tuesday</td>
<td>10:00 - 10:30AM</td>
</tr>
<tr>
<td><strong>Earth &amp; Space Sciences (ESS)</strong> at the loading dock</td>
<td>Second Tuesday</td>
<td>10:00 - 10:30AM</td>
</tr>
<tr>
<td><strong>Incubator (LIHTI)</strong> at the side door</td>
<td>Third Monday</td>
<td>1:15 – 1:45PM</td>
</tr>
<tr>
<td><strong>Engineering (ENG)</strong> at Material Sciences dock</td>
<td>Fourth Tuesday</td>
<td>10:00 - 10:30PM</td>
</tr>
<tr>
<td><strong>Life Sciences Building (LSB)</strong> at the loading dock</td>
<td>Every Tuesday</td>
<td>1:00 - 1:30PM</td>
</tr>
<tr>
<td><strong>Grad Chemistry (GC)</strong> at the loading dock</td>
<td>Every Wednesday</td>
<td>10:00 - 10:30AM</td>
</tr>
<tr>
<td><strong>Clinical Science Tower (CST)</strong> by the freight elevator</td>
<td>First Thursday of every month</td>
<td>17th Floor 15th Floor 1:15 - 1:45PM 2:00 - 2:30PM</td>
</tr>
<tr>
<td><strong>Basic Science Tower (BST)</strong> by the freight elevator</td>
<td>Second Thursday of every month</td>
<td>7th Floor 1st Floor by DLAR 1:15 - 1:45PM 2:00 - 2:30PM</td>
</tr>
<tr>
<td><strong>Psychology A (Psych A)</strong> at the loading dock</td>
<td>Third Thursday</td>
<td>1:00PM – 1:30PM (you must first call EH&amp;S at (631) 632-3739 to schedule a pickup.)</td>
</tr>
<tr>
<td><strong>School of Marine and Atmospheric Sciences (SoMAS) @ Dana Hall</strong></td>
<td>Fourth Thursday at Dana Hall Formalin Transfer Room</td>
<td>10:00 – 10:30 AM</td>
</tr>
<tr>
<td><strong>School of Marine and Atmospheric Sciences (SoMAS) @ Challenger</strong></td>
<td>Fourth Thursday at Challenger South East Exit Door (Near Rm 123)</td>
<td>10:45 – 11:15 AM</td>
</tr>
</tbody>
</table>