Hazardous Chemical Waste Management

Chemical waste is considered hazardous if it appears on one of the lists of hazardous wastes found in Federal (40 CFR Part 261) or State (6 NYCRR Part 371) regulations or exhibits one or more of the following hazardous 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 any 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.
- Keep incompatible wastes separated by DISTANCE or separate using SECONDARY CONTAINMENT.
- **NEVER** store containers near sink or floor drains unless stored within proper secondary containment.
- Provide SECONDARY CONTAINMENT for all liquid hazardous chemical waste storage containers.
- **INSPECT** containers for leaks or corrosion weekly.

**Labels for PROCESS waste** (process waste is chemical waste that has been generated as a result of a process/experiment/procedure/etc.):
- Place a Farmingdale State College HAZARDOUS WASTE LABEL on each PROCESS waste container (contact EH&S at x2105 or ehs@farmingdale.edu to request additional labels):

HAZARDOUS WASTE

**CONTENTS** (No abbreviations or formulas):

________________________

Storage Start Date:  
(For EH&S Use Only)  Questions?  Call EH&S at x2105

_____/_____/_____

Farmingdale State College

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.
- **DO NOT DATE** the labels; that section of the label is reserved for EH&S ONLY once the waste is properly stored.
- For waste chemicals in their ORIGINAL CONTAINERS, a 1” X 2” FLUORESCENT GREEN “HAZARDOUS WASTE” label (see below) may be used in addition to the container’s original label (Do not cover original label).
Request for Chemical Waste Pickup

- A REQUEST FOR PICKUP OF CHEMICAL WASTE FORM should be filled out prior to when the chemical waste is to be picked up from your lab or work area (a different type of form should be completed for a Regulated Medical Waste/Red Bag pickup request – contact EH&S at x2105 for assistance). Please Note: This is not required and serves as an internal inventory tracking mechanism only.
- The form has two copies – the front/white copy to be included with the chemicals for pickup, and the back/yellow copy is for your own records.
- INSTRUCTIONS on how to complete the form can be found on the REVERSE of each form/page.
- The IDENTIFICATION of the chemicals on the form MUST MATCH those on the HAZARDOUS WASTE LABEL(S) placed on the chemical waste container(s).
- The NUMBER of containers (of identical size), the SIZE/CAPACITY of the containers, and the AMOUNT WITHIN each container must also be listed on the form.
- When your container(s) is FULL, or you need your waste picked up for any reason, please submit a work order through the Physical Plant work order system. To access the work order system, click here. Once in the work order system, select "Moving & Trucking" from the category drop down feature, and then choose "Waste/Hazardous Materials" from the subcategory drop down menu. Please be as descriptive as possible in the "Description" section - tell us the TYPE(S) of waste you need picked up (i.e. acids, bases, flammables, assorted toxics, etc.), how many containers and of what size, etc.
- IMPORTANT! You MUST COPY the EH&S Officer on ALL work order requests involving hazardous waste! Scroll down to the bottom of the work order you're creating and enter jeff.carter@farmingdale.edu in the "E-mail Id(s) To Notify" field.
- If you've completed a REQUEST FOR PICKUP OF CHEMICAL WASTE FORM, you may scan and attach it to your work order as well using the "Attach File" feature included therein.
- If you have ANY questions at all when completing your work order request, you may CALL the Environmental Health and Safety Officer at (631) 420-2105, or EMAIL ehs@farmingdale.edu (or jeff.carter@farmingdale.edu).

Unknown Waste:
- All waste MUST BE IDENTIFIED before requesting a waste pick-up.
- 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 Request for Pickup of Chemical Waste Forms are available from the Office of EH&S (call x2105 or email ehs@farmingdale.edu to make your request).

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

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For further information, contact the Office of Environmental Health & Safety  
Farmingdale State College, Horton Hall, Farmingdale, NY 11735  
Phone: 631-420-2105  FAX: 631-420-9173  
In case of an emergency, contact University Police at (631) 420-2111

Last Revised 09/03/14
# CHEMICAL SPILL RESPONSE PROCEDURES

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

<table>
<thead>
<tr>
<th>Minor Spill - Definition</th>
<th>Major Spill - Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 gallon of a low toxicity chemical or spill involving the following:</td>
<td>More than 1 gallon of a low toxicity chemical or any spill involving the following:</td>
</tr>
<tr>
<td>• 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)</td>
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</tr>
<tr>
<td>• Blood and/or body fluids</td>
<td>• Unknown chemical or product</td>
</tr>
</tbody>
</table>

## 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 Safety Data Sheet (SDS) 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. Request a waste pickup of the spill debris by contacting EH&S at x2105 or ehs@farmingdale.edu.
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 631-420-2111 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 seek medical assistance or Emergency Department if warranted for treatment. If possible, bring chemical label or SDS.
5. University Police may contact EH&S to determine how best to appropriately respond to the spill.
6. Staff knowledgeable about the spill should provide responders with all pertinent information and SDS.
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 to remedy root cause, as applicable.

**In case of emergency, contact University Police at x2111**

**For all other information contact:**
Office of Environmental Health & Safety
Farmingdale State College, Horton Hall
Farmingdale, NY 11735
Phone: 631-420-2105 FAX: 631-420-9173
[http://www.farmingdale.edu/administration/administration-finance/ehs.shtml](http://www.farmingdale.edu/administration/administration-finance/ehs.shtml)
10 Rules of Lab Safety

1. Understand the Hazards of Your Chemicals
   - Read all labels
   - Read the Safety Data Sheet (SDS)
   - Conduct a hazard and risk assessment

2. Protect Yourself from These Hazards
   - Always wear proper lab attire when in the lab
   - Always wear nitrile gloves (minimum) when handling chemicals
   - Wear chemical goggles when working with corrosives and safety glasses when handling other chemicals that may splash
   - Always follow all safety rules

3. Keep Your Exposure As Low As Possible
   - Substitute chemicals with less hazardous chemical
   - Use smallest amount of chemical
   - Keep containers closed and covered

4. Use the Fume Hood for Particularly Hazardous Chemicals
   - [cancerogens, acutely toxic, reproductive, flammable]
   - Make sure hood is working properly before beginning work
   - Follow Fume Hood Use Procedures

5. Keep the Clean, Clean & the Dirty, Dirty
   - Leave Personal Protective Equipment (PPE) in lab
   - Don’t touch common items (door knobs, faucets, phone, computer, radio) with gloves
   - Wash your hands often
   - Decontaminate work surfaces at the end of the day

6. Take Required Training
   - Chemical Safety, Biological Safety, Bloodborne Pathogens, Hazardous Waste Disposal, Hazard Communication/Right-to-Know, etc.
   - See schedule: [http://www.farmingdale.edu/administration/administration-finance/ehs.shtml](http://www.farmingdale.edu/administration/administration-finance/ehs.shtml)

7. Store Chemicals Properly
   - Label all containers with the name of the chemical
   - Segregate chemicals by hazards
   - Always use secondary containment for liquid chemicals
   - Do not store flammables in a domestic refrigerator

8. Dispose Of Chemicals Properly
   - Do not put hazardous chemicals down the drain
   - Do not use squirt/wash bottles over the sink
   - Use Hazardous Waste Labels
   - Do not mix incompatible waste types
   - Do not allow waste to accumulate over long (>6 months) periods of time

9. Know Where the Emergency Equipment Is & How to Use It
   - Eyewash, shower, fire extinguisher, spill kit
   - Have a plan to shut down lab processes and exit the building during an alarm

10. Report All Accidents