

# The Waste-Paper

*"Waste is a terrible thing to mind"*

Volume 18 Issue 3

March 2015

## Cleaning Chemical Spills

Like death and taxes, chemical spills are practically inevitable. Spill cleanup might appear to be a daunting task, but is actually rather simple. Be proactive and take steps to ensure you have the knowledge and proper materials to deal with a spill *before* it happens.

Carefully consider the following:

1. Does your area have a fully stocked spill kit and where is it?
2. If not, where is the [nearest EHS spill kit](#)?
3. What types of chemicals are in your area?
4. Do any chemicals require special spill control materials or processes, like mercury or hydrofluoric acid? If so, do you have access to these spill control materials?

Once a spill occurs, assess the situation. If the spill is greater than 1-gallon, is an unknown material, went down the drain, is on fire, is reacting violently, is creating overwhelming and/or harmful vapors, or is otherwise too hazardous for you to manage, contact Public Safety at 911 from any campus phone or (609) 258-3333 from a non-campus/cell phone. Public Safety will contact EHS to provide assistance and advice.

Notify everyone in the adjacent area, evacuate the area and close the doors.



If the spill is manageable, two people from the lab should clean it up. **Never ask a janitor or special facilities worker to clean up any spill other than water.** One person should be responsible for cleaning the spill; the other will assist with supplies.

Consider what you will need to do to protect yourself from overexposure to the chemical and to handle the material safely. If you are unsure or do not have what you need, contact EHS for advice (this should be done through Public Safety after regular business hours). Consult the safety data sheet (SDS) or other sources of information, as needed.

### Guide to using loose absorbent



Surround spill



Work from outside in



Scoop up carefully



Place in container for disposal



Put on appropriate protective equipment. Tyvek shoe covers help prevent spread of contamination. Gloves, chemical splash goggles and vinyl aprons prevent bodily exposures. This personal protective equipment is available in the EHS spill kit.

The assisting worker should hand materials as needed to the person cleaning up the spill, from a clean area, to avoid spreading contamination. Contain the spill by surrounding it with loose absorbent or spill pads. Start from the outside and work your way towards the center. Once it is covered and absorbed, sweep the material into the collection bag and label it as hazardous waste, if applicable.

## Special Materials

**Hydrofluoric acid** is incompatible with many spill control materials. Keep a supply of 3M Powersorb<sup>®</sup> or similar HF-compatible materials on hand if you store and use HF. Do not collect and store in glass.

**Mercury** spills also require special handling and materials; contact EHS for more information.

## Cleaning Spills of Infectious Materials

Most spills involving infectious agents, including human blood and body fluids, and recombinant DNA materials can be effectively handled by researchers. However if the spill has occurred in a public area such as a hallway or involves breakage of containers inside of an operating centrifuge, notify DPS (911 from a house phone or 609-258-3333 from a cell phone). Human blood and body fluid spills can be cleaned by lab staff who are enrolled in the Bloodborne Pathogen Program (BBP). If you are not in the BBP program, seek assistance from EHS (x5294).

### ***This Month's Waste Disposal Drop Off: Wednesday, March 25, 2015***

#### **Lewis Thomas loading dock**

- Collection room open from 2:00 - 4:00 PM

#### **E-Quad room 7 (E-Quad and Bowen)**

- 2:00 - 3:00 PM

#### **Jadwin Hall/Frick Chemistry**

- 9:00 - 10:00 AM

#### **Hoyt and 185 Nassau**

- Waste collection is on an as-needed basis. Contact [Kyle Angjelo](#) to make arrangements.

## Infectious Materials Spills Cont...

The following supplies must be available in the lab:

- An appropriate disinfectant which works against the agents of concern. For clean-up of larger spills, alcohol is not recommended due to flammability concerns.
- **Personal protective equipment (PPE)** including a lab coat or gown, gloves, safety glasses, face shield and shoe covers may be required.
- sharps containers for collection of broken glass
- absorbent material such as bench liners or paper towels
- tongs to pick up broken glass
- autoclave bags

Instruct injured or exposed personnel to administer first aid and seek medical attention.

### Large Spills

- Aerosols can form if material is dropped. Leave the room and allow 20 minutes for aerosols to settle. Place a sign on the door warning staff not to enter the room due to a spill.
- Remove contaminated lab coat or clothing and wash exposed skin. Put on clean gloves, a lab coat and other PPE as needed.
- Prepare enough volume of a 1:10 dilution of chlorine bleach or other approved disinfectant to saturate the contaminated area.
- Contain the spill with paper towels or other absorbent material such as bench liners.
- Flood the spill area with disinfectant. Leave on for 10 minutes.
- If glass is present, use tongs or forceps and a dustpan to remove pieces and place into a sharps container.
- Discard spill clean-up material into a regulated medical waste container.
- Using clean paper towels and a disinfectant, wipe all surfaces that may have come in contact with the spilled material.
- Discard gloves into regulated medical waste container and wash hands.
- Autoclave an overtly contaminated lab coat prior to placing into laboratory laundry bag.

Notify Principal Investigator or Supervisor and the BSO.

## State of NJ Inspection

As many of you are aware, last month the New Jersey Department of Environmental Protection (NJ DEP) conducted an unannounced inspection of hazardous waste activities for part of our campus. The areas covered by the inspection included Molecular Biology, Geosciences, Ecology and Evolutionary Biology, and the Lewis Sigler Institute, in Carl Icahn, Lewis Thomas, Schultz, and Moffett Laboratories, Guyot Hall, the trade shops in MacMillan Building as well as the 90-Day Storage Facility.

No notices of violation were issued. The inspector was pleased with the program we have in place and was impressed with the level of compliance witnessed. Although recent state inspections of the hazardous waste program have gone very well, it is vital that the campus observe continued vigilance in order to keep in good standing with our regulators.

Indeed the length of time spent on site by the NJ DEP continues to be minimized as a result of the hard work of many including; the chemical waste generators in the laboratories and maintenance areas, and the individuals responsible for the waste rooms in each of the campus waste management sites. It is quite an accomplishment that because the state inspectors know Princeton University to have an exemplary chemical waste program, they are inclined to perform a more reasonable, performance based inspection as a result of the good reputation of the Institution. Your performance matters!

The entire staff here in EHS extends our heartfelt congratulations and gratitude to all who were involved in the Moffett inspection.

<i><b>EHS HAZARDOUS WASTE CONTACTS</b></i>	
Main Office	8-5294
Kyle Angelo (Chemical Waste)	8-2711
Steve Elwood (Radioactive Waste)	8-6271
Jackie Wagner (Biohazardous Waste)	8-1427
Tom Drexel (Waste Paper)	8-6255
EHS Web Page <a href="http://www.princeton.edu/ehs">http://www.princeton.edu/ehs</a>	

# HOUSEHOLD HAZARDOUS WASTE COLLECTION AND ELECTRONICS RECYCLING EVENTS

Sponsored by the Mercer County Improvement Authority

**SATURDAY, MARCH 21, 2015 / 8AM–2PM**

**SATURDAY, JUNE 13, 2015 / 8AM–2PM**

**SATURDAY, SEPTEMBER 26, 2015 / 8AM–2PM**

John T. Dempster Fire School / Bakers Basin / Lawrence Station Rd. / Lawrence Twp.

MATERIALS ONLY ACCEPTED ON THESE DATES AND TIMES, RAIN OR SHINE



## ACCEPTED MATERIALS

Aerosol Cans / Used Motor Oil / Propane Gas Tanks / Pesticides & Herbicides / Car Batteries  
Paint Thinner / Oil Based Paint / Stains & Varnishes / Gasoline/Anti-Freeze / Driveway Sealer  
Insect Repellents / Mercury / Fluorescent & CFL Bulbs



## MATERIALS NOT ACCEPTED

NO LATEX PAINT / NO Heating Oil / NO Infectious Waste / NO Radioactive Materials  
NO Explosives or Munitions / NO Railroad Ties / NO Asbestos / NO Tires / NO Wood  
NO Fencing / NO Air Conditioners / NO Helium or Oxygen Tanks / NO Unknowns



## ACCEPTED ELECTRONICS

Computer / Printers / Copiers / Fax Machines / Stereos / Televisions / Microwaves



Residential Waste Only / NO COMMERCIAL BUSINESSES  
Mercer County Residents Only / Proof of Residency Required (Driver's License)

Brian M. Hughes, County Executive / John P. Thurber, Chairman / Phillip S. Miller, Executive Director

FOR MORE INFORMATION CALL 609-278-8086 OR VISIT [WWW.MCIANJ.ORG](http://WWW.MCIANJ.ORG)