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# The Waste-Paper

*“Waste is a terrible thing to mind”*

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*Mercury Waste Drop-off – January 28th*

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## *Just Arriving?*

Welcome to Princeton! If you are here for extended research or are just staying for a short-term collaboration, here are a few chemical waste management items we hope will be helpful to you. Environmental Health & Safety (EHS) coordinates the hazardous waste program on campus. Chemical wastes are collected from Frick, E-Quad and Lewis Thomas Labs on the last Thursday of each month by a contractor. However, the lab researchers must bring waste down to the designated collection point the day before according to your department schedule which can be found on the [EHS website](#).

Until that time, waste is managed in the lab or work area. Here's a summary of the requirements:

- Waste containers must be labeled as soon as waste collection begins. EHS provides labels, which you should complete and affix to the container right away, or else you must write the words *Hazardous Waste* and the full chemical name of the contents on the container. White/clear carboys are for **SOLVENTS ONLY**. Use blue carboys for compatible corrosive wastes.
- Waste containers must always be kept closed except during filling. Do not leave funnels in waste containers in anticipation of future fillings.
- Store away from floor drains and sinks or else use secondary containment to contain any spillage.
- Disposal of any hazardous chemical waste down the sink is prohibited. Evaporation of solvents is also a prohibited means of disposal.

If you would like more information about waste disposal, please visit the [Waste](#) section of the EHS web site. EHS works closely with researchers and other waste generators to ensure compliance with state and federal hazardous waste regulations. Please help us to continue our strong record of compliance and environmental stewardship.

## *Solvent Usage and Transportation*

Recent incidents have triggered EHS to review some of the ways that labs are purchasing, transporting, and using solvents. Please keep in mind the following when purchasing and transporting solvents:

- Always purchase the smallest quantity necessary for your laboratory use. In some cases, a 4L bottle may be the same price or cheaper than a 500mL bottle. Regardless of price, one should always purchase the size that best fits their needs. If a lab typically uses 100ml per month of a particular solvent, there is no reason to purchase a 4L bottle.
- Always transport reagent bottles, especially glass bottles, via a side-walled cart or using proper sized bottle carriers.
- Special care should be observed when transporting and dispensing carcinogenic solvents such as benzene, chloroform, and dichloromethane. Exposure limits for these compounds are extremely low and a spill can result in significant airborne concentrations and as a result, significant lab downtime.
- If utilizing 4L glass bottles of one of the aforementioned solvents is absolutely necessary, be sure to use a bottle carrier (see image below). The bottle should remain in the bottle carrier at all times to prevent incidental breakage and spills. Please ensure that the carrier is labeled with the contents.



EHS is currently working with departments to stock poly-coated glass, plastic, and/or aluminum bottles of common solvents to decrease the likelihood of large spills due to catastrophic container failure.

HAZARDOUS WASTE		
Federal & New Jersey Laws Prohibit Improper Disposal		
Department _____	Phone _____	
Lab Group _____		
Responsible Individual _____		
Date Placed in 90 Day Storage _____		
Contents _____	Approximate % _____	
Use IUPAC _____	_____	
Nomenclature _____		
Hazard Class (if known)		
1. Poison	4. Oxidizer	7. Reactive to Stock, Triox, Air or Water
2. Flammable Liquid	5. Corrosive	
3. Flammable Solid	6. Toxic or Former	
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## Training Requirements

Just a reminder to those new to the University, or those who may be veterans but have never received required safety training:

All faculty, staff, students, and visiting researchers working in laboratories are required by University Policy to attend [Laboratory Safety Training](#). Laboratory workers must attend a general session given by EHS and receive additional training specific to their laboratory from their department and/or principal investigator.

Regardless of previous training and experience, anyone planning to use radioactive materials, must complete initial radiation safety training before using radioactive materials. Initial radiation safety training is divided into two segments: A set of web-based Radiation Basics modules with an accompanying test (<http://web.princeton.edu/sites/ehs/osradtraining/coverpage.htm>) and a [Radioactive Materials Safety Class](#). Participants must successfully pass the Radiation Basics Test before attending the Radioactive Materials Safety Class.

Research groups using Biosafety Level 2 materials and/or recombinant or synthetic DNA not exempted from the [NIH Guidelines](#), must attend [Intro to Biosafety](#) training. [Bloodborne Pathogens](#) training is required annually for all faculty and staff who work with human-source material, HIV or Hepatitis viruses in a laboratory setting. Human-source material includes cells, blood, serum, tissues, feces, and body fluids (sputum, urine, saliva, etc.), originating from humans.

Personal training records are available by logging into the University's learning management site (LMS) at [www.princeton.edu/training](http://www.princeton.edu/training) and selecting the 'Learning History' link found under the *My Training* section of the left-hand tool bar. Check the [EHS training page](#) on the LMS as well for dates and locations of upcoming health and safety training sessions. Call EHS at 8-5294 if you have any questions.

<i>EHS HAZARDOUS WASTE CONTACTS</i>	
Main Office	8-5294
Kyle Angjelo (Chemical Waste)	8-2711
Sue Dupre (Radioactive Waste)	8-6252
Jackie Wagner (Biohazardous Waste)	8-1427
Marcia Leach (Waste Paper)	8-5294
EHS Web Page	<a href="http://www.princeton.edu/ehs">http://www.princeton.edu/ehs</a>

## Mercury Waste

The campus has three processes for handling mercury in various forms: quarterly disposal of elemental mercury waste; routine disposal of mercury containing compounds; and pick-up of mercury containing lamps/bulbs.

Elemental mercury waste is disposed of in the hazardous waste pick-ups quarterly in the months of January, April, July, and October. Intact mercury thermometers, mercury thermostats, and other mercury containing items are removed during these pick-ups as universal waste for recycling. Broken mercury containing devices and non-contained elemental mercury is removed as hazardous waste. Please store elemental mercury in your laboratory until the next designated quarterly pick-up.

Laboratory compounds containing mercury are removed at all routine waste pick-ups. The compounds are managed differently than elemental mercury at the disposal facility and thus are collected more frequently.

Intact mercury containing light bulbs and lamps (e.g., fluorescent tubes, compact fluorescent bulbs, etc.) are collected through a program managed by Building Services. If you have mercury containing bulbs or lamps, simply put the bulb aside and place a work order with Building Services for pick-up.



**Next Waste Pickup:**  
**Thursday,**  
**January 29, 2015**

*Bring Wastes to designated  
collection point on Wednesday,  
January 28<sup>th</sup>*

***Mercury Waste Drop-off***