
The Waste-Paper

The Hazardous Waste Disposal Monthly Update

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Did you know...

Federal hazardous waste regulations govern mixtures of non-regulated materials (solid waste) and listed hazardous chemical wastes (which include many commonly used solvents). The so-called “mixture rule”, introduced in 1980, is intended to prevent generators from diluting hazardous wastes streams by mixing them with non-hazardous substances and declaring the waste non-hazardous for disposal.

At Princeton, the most common uses of “listed” hazardous waste compounds are as components of cleaners and degreasers. For example, acetone, tetrachloroethylene, and methylene chloride are present in products such as State[®] SSD degreaser and various graffiti removers (e.g., Enverros Wallglide, Amnesty Jelled Graffiti Remover, D-Vandal[™]). When these cleaners are used with rags to wipe down surfaces, the rags are considered regulated hazardous wastes under the mixture rule and therefore must be disposed as hazardous waste.

One way to minimize the quantity of rags that must be managed through the hazardous waste program is to utilize an industrial laundry firm that is licensed to launder rags and other items contaminated with listed compounds. Another option is to consider changing to a more environmentally safe product that does not contain any listed compounds. If a non-listed solvent is used for wiping surfaces, the rags can be dried and disposed of via regular trash. If you are a frequent or high-volume generator of mixed wastes, contact EHS for help in exploring these options.

For a list of the EPA listed chemical compounds, or if you have questions about proper waste disposal, contact Steve Elwood at selwood@princeton.edu or by telephone at 8-5294.

Question of the Month: Can I combine Nochromix[®] waste with solvent waste?

Answer: No, but thank you for using Nochromix[®] instead of a chromium-based cleaner. Nochromix is an oxidizer and should not be mixed with flammable liquids. If it is mixed with sulfuric acid, it should not be added to solvent waste since it may cause the pH to drop below 2.

Chromium-based cleaners, such as Chromerge[®] result in hexavalent chromium waste, which is persistent in the environment. There are a number of environmentally friendlier alternatives for removing proteins and stubborn debris from glassware including the following:

- [Nochromix[®]](#) also utilizes sulfuric acid and is a very effective cleaner. It is much less expensive than Chromerge and is free of metals.
- [Micro 90[®]](#) (Cole-Palmer) works well for removing blood and most biological materials, as well as proteins.
- Enzymatic cleaners and detergents combined with a good scrub brush and some elbow grease works well for most residues.
- A 95% ethanol/hydrochloric acid bath or 95% ethanol/potassium hydroxide bath can be effective against organic residues. This procedure can sometimes etch glassware.

For more information, please contact Robin Izzo at rmizzo@princeton.edu or 8-6259.

REMINDER

All individuals working in labs, paid or unpaid, must attend Laboratory Safety Training provided by EHS. The next sessions are scheduled as follows:

Thursday, July 6 at 1:30 PM in 117 Lewis Thomas Lab
Tuesday, July 18 at 1:30 PM in 117 Lewis Thomas Lab

Additional courses are listed on the web at <http://web.princeton.edu/sites/ehs/Training/calendar.htm>

***This Month's Waste Disposal Drop-Off:
Wednesday, June 28, 2006***

Lewis Thomas Laboratory loading dock

- for wastes from Lewis Thomas Lab, Guyot, Moffett, Schultz, and other contiguous areas
- collection room open the day before the pickup on Wednesdays from 1:00 - 4:30 PM and Thursday from 8:15 - 9:00 AM
- coordinators: [Michael Fredericks](#) (8-1351) and [Mary Zikos](#) (x8-4095)

Jadwin Hall room 124

- for Physics only, wastes may be placed in the room only the night before the pickup
- contact [Joe Horvath](#) (x8-4364)

Cogen Plant - cogen and chilled water plant waste only

MacMillan Building - maintenance wastes only

Engineering School (room 7)

- for E-Quad and Bowen
- collection room open the day before the pickup from 2:00 - 3:00 PM
- coordinators: [Joe Laskow](#) (8-4739) and [Joe Palmer](#) (8-4706)

Frick loading dock

- for Frick, Hoyt, Green and 185 Nassau
- collection room open the day before the pickup from 1:00 - 2:00 PM
- coordinators: [Kevin Wilkes](#) (x8-3920)

Specific arrangements for getting material to the pickup site are the responsibility of the individual departments. Refer questions of this nature to your Department Safety Manager or Chemical Hygiene Officer. Generally, wastes must be at the pickup site by 9 A.M. the day of the pickup to be included. See [Storage of Chemical Waste](#) for more information.

<i>EHS HAZARDOUS WASTE CONTACTS</i>	
Main Office	8-5294
Steve Elwood (Chemical & Radioactive Waste)	8-6271
Marcia Leach (Waste-Paper)	8-5296
Don Robasser (Biohazardous Waste)	8-6256
EHS Web Page http://www.princeton.edu/ehs	