
The Waste-Paper

“A Waste is a terrible thing to mind”

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Disposing Computers and Electronic Equipment

Computers, computer monitors and other electronic equipment may contain enough heavy metals to be considered hazardous waste, but **DO NOT** simply discard them in regular trash or in the monthly hazardous waste pickup.

HERE IS WHY...

New Jersey's Department of Environmental Protection (DEP) Universal Waste Rule (recycle and disposal rules for certain batteries, thermostats, lamps, used oil, etc.) includes “consumer electronics”. Consumer electronics are defined in the rule as: “any appliance used in the home or business that includes circuitry” and includes the components and sub-assemblies that collectively make up the electronic products and may, when individually broken down, include batteries, mercury switches, capacitors containing PCBs, cadmium plated parts and lead or cadmium containing plastics. Some examples of consumer electronics include, but are not limited to, computers, printers, copiers, fax machines, VCRs, stereos, televisions, and telecommunication devices.

ALL computers and electronic equipment purchased by Princeton University must be turned over to Central Surplus for disposal.

If the equipment is in working condition and depending upon the age and model, it may be;

- Made available to other departments
- Donated to charity organizations
- Made available for sale to the public in the Surplus Warehouse
- Sent to an approved computer recycler

In addition, equipment that

- contains liquids ,
- contains known hazardous materials, or
- may be contaminated with chemical, biological or radioactive material

must be inspected by EHS before transferring to Central Surplus. These materials may need decontamination or may need the hazardous materials to be removed and disposed before transfer.

Under no circumstance may computers and electronics be put into the regular trash.

For questions about surplus, contact Sam Formica at 258-2347. For questions about the hazardous nature of these equipments, contact Steve Elwood at 258-6271.

Coming Soon?: State Inspection

The campus is overdue for an unannounced inspection of chemical waste activities by the NJ Department of Environmental Protection. As a reminder, per University policy, fines received for violations within a particular laboratory or work area are charged back to the offending department.

Please make an extra effort to ensure that your work area is in compliance, especially:

- All waste containers must be labeled as to their contents and with the words “Hazardous Waste”, preferably using a yellow waste label (available from EHS).
- All containers must be sealed except during transfers.
- Incompatible wastes must be physically separated.
- Waste containers stored near sinks, including cup sinks, should have secondary containment.

Please contact Steve Elwood at 258-6271 or selwood@princeton.edu for more information or to schedule an inspection of your area.



Sssssh... he's sensitive.

The compound that you just tucked “way back” in your lab group’s chemical stock room might end up costing your department or PI a substantial chunk of money.



Stop and think – are there hazards associated with prolonged storage of the materials? Well, the answer for most substances is no; however, compounds commonly used in organic and inorganic chemistry and even molecular biology research become unstable over time. Whether it’s dry picric acid, old diethyl ether, metallic azides, or sulfide/cyanide salts, these items require special handling by the waste contractor. Of course, special handling translates to special fees for “HI-HAZ” handling of such materials. A typical HI-HAZ container opening can cost up to \$3,500, not to mention the potential personnel and property damage risk. By long standing University Policy, extraordinary hazardous waste costs due to mismanagement are charged back to the Principal Investigator’s department.

-WHAT YOU CAN AND SHOULD DO-

Identify Time-Sensitive Materials

A partial list of peroxide-forming and unstable chemicals, along with precautions for handling and storage, is available in the Lab Safety Manual at <http://web.princeton.edu/sites/ehs/labsafetymanual/sec7c.htm>. Check the label or the material safety data sheet of any new or unfamiliar material to determine if other materials are time-sensitive. The Reactivity section of the MSDS usually contains such information.

Control Inventory

All chemicals, especially those prone to decomposition, should be marked with the date the material was opened. Keep track of the chemical inventory in your lab. It’s a good idea, not solely from a safety perspective, but fiscally as well. It is

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possible that your lab has several containers of the same reagent “hiding” in multiple locations. Make sure everyone in your lab knows the chemicals kept on-hand, especially those that are used on a limited or infrequent basis.

Identify and Dispose Unneeded Stock

Lab groups should get into the practice of conducting regular reviews of chemicals stocks. Have each member of the lab review the chemical inventory and “flag” those items for which there is a continuing need, and those that have become orphans. Once those chemicals are identified they can easily be labeled with a hazardous waste label and brought to the next [monthly waste collection](#). By “purging” your old stock chemicals and disposing of them via regularly scheduled waste collection, there is no cost to your lab group. If you choose to have our hazardous waste contractor perform the clean-out, the laboratory will be responsible for labor costs associated with chemical identification, segregation, and packaging. EHS will still pay all disposal costs associated with your wastes.

Conduct Lab Checkouts

Often legacy chemicals are generated over years of graduate student and research staff turnover within the labs. EHS highly recommends that all lab groups institute checkout procedures to ensure that all chemicals are adequately labeled and unneeded chemicals are disposed. A simple, one page document is all that is needed to cover a variety of items such as building key collection, chemical identification and disposal, equipment relinquishment (computers, etc.) as well as other lab-specific or departmental requirements.

For additional information on chemical cleanouts and managing chemical stocks, see the EHS website (<http://web.princeton.edu/sites/ehs/chemwaste/cleanout.htm>) or contact EHS at 8-5294.

EHS HAZARDOUS WASTE CONTACTS	
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	