

TO: Lab personnel

FROM: Mary Duda, Chemical Coordinator, Environmental Health and Safety

SUBJECT: Hazardous Waste Costs Covered by Generating Lab

DATE: August 1, 2013

The costs for the following types of services are expected to be covered by the lab, not the Environmental Health & Safety Office (EH&S). In the event that a lab is unable to cover the cost, responsibility falls to the department and ultimately the college or school.

While EH&S maintains a budget to cover costs for routine hazardous wastes generated as a result of research, education and facilities activities, the items listed below are not covered by the EH&S Office, rather by the Lab or Project generating the waste or entity requesting the service. EH&S will work with the lab to secure competitive quotes from the contracted environmental service provider and will oversee the operation to ensure full compliance and satisfaction with the work requested.

To avoid these costs, EH&S stresses that it is in the lab's best interest to maintain an active, accurate inventory of their chemicals as required, ordering only what is needed and removing expired or unwanted chemicals before they become more hazardous. Remember, once you've determined that you no longer need a particular chemical or the expiration date has been reached, the chemical becomes a waste.

Type of Service	Lab Cost	Way to Minimize Cost
Cylinder and Lecture Bottle Disposal	Specific costs will depend on the size and type of cylinder for disposal. EH&S will work w/ the lab to provide a quote of the costs associated with their specific request prior to removing the cylinders. Disposal costs can range from \$100-\$3000(+) depending on the contents & volume.	Order reusable lecture bottle gasses when possible; order compressed gasses from vendors that will take back their cylinders and order only what you need.
Unknown Chemical Waste Testing	Each characteristics test will cost the lab roughly \$50. These tests are conducted in the lab by our onsite vendor to determine the basic hazards for safe handling and processing the material.	Ensure all chemical and waste collection containers are clearly labeled with full chemical name, date and initials; verify chemical information with researchers leaving the lab or Institute prior to their departure.
Highly Hazardous Chemical Disposal	Explosives, temperature and shock sensitive chemicals generally require additional measures to ensure their safety for transportation and disposal. These requests may range from \$500-\$1500(+) depending on the material & volume.	Maintain an active inventory; order only what you need and identify the owner of the material on the container w/ the date of expiration. Determine if a less hazardous chemical can be used for the process as an alternative.

Analytical Testing	Testing needed to identify contents of equipment or material slated to leave campus for disposal can range from \$150-\$5000 depending on the required level of analysis. Typically this pertains to items thought to contain PCBs and heavy metals.	Know the contents and age of your equipment prior to requesting disposal.
Lab Cleanouts	A cleanout may be needed due to a lab move, decontamination request, new PI coming to campus or a researcher leaving campus with a lot of legacy chemicals to remove at one time. Due to the high volume of chemicals at this one time, a fee associated with the labor, materials, transportation and disposal is placed on the lab to manage. These requests can range from \$500-\$1,500(+) depending on volume and types of chemicals identified.	Keep an active inventory. Reach out to colleagues in other labs to see if they can use your unwanted chemicals.
Project* Related Items	Analytical testing, decontamination, removal of abandoned wastes and disposal of project related wastes; such as, waste water, contaminated soil and equipment, oil with PCBs, etc. will be billed to the Project.	Ensure the departing PI is held responsible for costs associated with their residual chemical wastes or decontamination.

**The term Project refers to Facilities capital projects and renovations that have Institutional funds allocated to complete a particular scope of work. In the event waste is generated due to a renovation or capital project EH&S is available to facilitate the waste management and compliance needs but funds should be allocated through the project.*

Adapted with permission from "Hazardous Waste Costs Covered by DLC – September 2010 (Massachusetts Institute of Technology)"