



LABORATORIES

Health, Safety & the Environment

at Carnegie Mellon University

A Newsletter from Carnegie Mellon University's Chemical Hygiene Officer

August 2006

Chemical Hygiene Training Review (Part 3 of 12)

Topic of the Month – Emergency Response

1. It is critical that ALL occupants of a laboratory are aware of the correct emergency response procedures.
2. Details of the emergency response procedures are found in the laminated Emergency Response Guidebook (ERG) posted in every laboratory. All employees should review this guide regularly. *If your ERG is missing or has fallen from the wall, contact me at markb2@andrew.cmu.edu and the problem will be corrected.*
3. Probably the most important thing to know is to call University Police (8-2323) in the event of all but the most minor emergencies. **DO NOT CALL "911"**. Our police will coordinate any responses needed for the emergency, including ambulance, EH&S, Haz-Mat or Fire Department.
4. When you call University Police, be sure to give them full information of the situation. This includes
 - The nature of any injuries, if any
 - The name of any chemicals or hazardous materials involved (spell them if necessary)
 - Exactly what happened and exactly where it occurred
5. After you make the call, locate yourself in a safe place where you can be contacted for further information, if it is needed.
6. If an injury or accident involves a hazardous material, try to obtain the MSDS for the material(s) **IF YOU CAN DO SO WITHOUT HARM**. The MSDS may then be supplied to the emergency responders (i.e., Fire Department or ambulance personnel.)
7. There will be cases where you can do some emergency response, but only under certain circumstances. For example, you can provide First Aid, **but only if you have been trained to do so**. Also, you may respond to small-scale chemical spills, **but only if you have been trained to do so**. It is critical that untrained personnel do NOT perform any emergency response. Improper responses may worsen an already bad situation.
8. Remember that persons exposed to hazardous chemicals during a spill or leak, have a right to a medical consultation to determine any possible effects of their exposure. Contact EH&S if this has occurred.
9. Most accidents and injuries require some sort of follow-up paperwork. Any injury that occurs requires that an accident report be completed and sent to EH&S. Chemical spills will be investigated by EH&S and findings and recommendations will be distributed as needed.

Fifteen minute lab fix

This month, the quick lab fix is related to our subject of emergency response: I would like you to check to make sure that you have a spill response kit in your laboratory. Your kit should contain response items that address both the types of hazards you have in your lab (i.e., acids, bases, solvent and/or mercury) as well as the amount that might be involved in a spill, typically the size of your largest container of the material. If you have responded to a spill recently, you may have forgotten to replace some of the supplies used up. Now is the time to do this!

Also, if you are interested in having someone (or more than one) from your lab attend a training session on spill response; please let me know at markb2@andrew.cmu.edu.

Waste Minimization

A very important portion of our hazardous waste program is the Waste Minimization Plan—our process for reducing both the quantity and the hazards associated with the waste we generate from our laboratories. These guidelines will help in this effort. Please incorporate them in your lab operations whenever possible:

1. Micro-scale experiments whenever possible, to reduce the amount of hazardous materials used
2. Substitute less hazardous materials for more hazardous ones, such as biodegradable cleaner for solvents, non-chlorinated solvents for chlorinated ones, No-Chromix for chromic acid)
3. Include bench-top neutralization as part of experimental protocol
4. Consider recycling, re-use or reclamation of hazardous materials as part of your work. For example used solvents may still be appropriate for glassware cleaning.
5. Eliminate the use of heavy metals, especially mercury, whenever possible.

Gloves Outside the Laboratory

It is poor lab practice to wear protective gloves outside of the laboratory. A number of people have expressed to EH&S their concern that, when seeing lab workers wearing protective gloves in hallways and elevators, there may be chemical contamination being spread to public building spaces. In nearly all circumstances, the glove use is due to carrying reagents or samples from lab to lab. The proper protocol for this sort of transfer of hazardous materials is to place the items in a secondary containment. Then transfer can be made without the need of wearing gloves in the hallways.

Training Classes

The next Hazardous Waste and Lab Safety training sessions will be held from 9:30 AM to Noon on:

Wednesday August 9th and Wednesday September 13th, at a location to be announced, probably at Mellon Institute.

Thursday August 31st and Thursday September 28th, at Doherty Hall 4303.

Please check our training web site to reserve a spot at one of the sessions: http://ehs-alert.fms.bap.cmu.edu/Training/training_laboratory_safety.htm

Upcoming Hazardous Waste Pick-up

The following waste pick-ups are scheduled for **August and September**:

From Mellon Institute, 9:30 - 11:30 AM: **Aug 1, Aug 12, Aug 29, Sep 12, Sep 26**

From Wean and Doherty Halls, 12:30 - 3:00 PM: **Aug 1, Aug 12, Aug 29, Sep 12, Sep 26**

From Porter, Roberts, Hammerschlag, PTC and other campus locations, 9:30-11:30 AM: **Aug 2, Sep 13**

Penn Avenue and Robotics Engineering Consortium, your next pick-up is **August 17, 2006**

Computers will be picked up on **Aug 3 and Sep 14**

Remember, you need to be present in the lab for the pick-up--if you cannot, make prior arrangements with EH&S to ensure access to the waste.

Please print out this newsletter and post or circulate it in your lab!!