



# LABORATORIES

## Health, Safety & the Environment

### at Carnegie Mellon University

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A Newsletter from Carnegie Mellon University's Chemical Hygiene Officer

July 2006

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## Chemical Hygiene Training Review (Part 2 of 12)

Each month in this newsletter, a section of the Lab Safety training information is presented for review. Monthly reading of this will help refresh lab workers of these important safety items.

### Topic of the Month – Personal Protective Equipment

Because of the many different types of hazards present in the laboratory, there are many different types of personal protective equipment that may be necessary for you to use. ***It is important to know that it is a requirement of the Occupational Safety and Health Administration (OSHA) that the employer (Carnegie Mellon University) must provide appropriate protective equipment to all employees working with hazardous materials.***

Surprisingly, the first thing I want you to remember is something that I DON'T want you to wear, and that is a respirator. When lab workers properly follow the chemical handling and use procedures taught in our training classes and when appropriate protective equipment and fume hoods are used, there will be *no need to wear a respirator*. People who wear respirators must receive regular training and medical evaluations. This is a great deal of additional work both for us and for you, so, since they are not needed, we do not permit their use in the labs. You CAN wear disposable paper face masks for your own comfort when in the lab, though you need to know that they are not suitable protection from most chemical **OVER**exposures. If you believe that you have a special situation that mandates the use of a respirator, please contact Mark Banister at [markb2@andrew.cmu.edu](mailto:markb2@andrew.cmu.edu) or Andrew Lawson at [alawson@andrew.cmu.edu](mailto:alawson@andrew.cmu.edu).

Gloves are another critical item of personal protection. The important things to know about them is that you must always use a proper glove if you are handling a hazardous chemical or if a splash of chemical to your hands is a possibility. When selecting a glove, be sure to get one that fits your hands properly, so that it will be comfortable to use. Also, be sure that the glove material is approved for the chemical that you will be working with. There is no universal glove material that will work on all chemicals—you need to investigate the gloves available to ensure that you have one rated for your chemical. This is best determined by using the glove compatibility charts available in the catalogs where gloves are sold.

Eye protection is very important as well. The important thing with eye protection is that you be sure to wear protective *goggles* and not just glasses. Goggles are necessary to prevent splashed materials from running down your face into your eye, as would happen if only glasses were worn. Goggles are needed for all work where there is a possibility of a hazardous chemicals splashing into your eyes.

Personal protection items are needed for other labs hazards as well. For example, protective eyewear is needed for laser use. Choosing proper laser glasses is extremely important and rather difficult. The eyewear is very specific to the wavelength of the beam as well as its intensity. For the most part, laser eyewear **MUST** be purchased for the specific use and are seldom interchangeable between different laser units. Contact EH&S at 8-8182 for assistance in selecting proper laser eyewear.

## Summertime and Sandals

Every summer we have a problem with laboratory workers wearing sandals or other open-toed shoes. Because of the risk of both a chemical splash to the exposed skin and the possibility of stepping into a container (or worse yet, a spilled chemical) the Chemical Hygiene Plan for the University FORBIDS the wearing of open-toed shoes in the lab. I know that it is hot out and some of the labs are uncomfortable in the heat, but we need to follow this requirement. Many lab people find it helpful to keep a pair of closed-toe shoes at their desk so they can wear their comfortable sandals outside of the lab during their working day and have a proper shoe to wear in the lab.

## Laser Safety

Although EH&S has been addressing laser safety issues for a number of years now, we are now starting a Laser Safety Committee for the University. We are looking for participants from all departments in which lasers are used (not necessarily just those with laboratories) to join the committee. We anticipate quarterly meetings (probably with a pizza lunch) where the committee will look at the implementation of laser safety procedures, answer questions, resolve questions or problems, and otherwise facilitate information transfer between users and the committee. If you have an interest in getting involved or if you have any questions about the committee, please contact me at [markb2@andrew.cmu.edu](mailto:markb2@andrew.cmu.edu).

## Upcoming Training—June & July 2006

The Hazardous Waste and Lab Safety Training will be held from 9:30 AM to Noon on these dates:

**Wednesday, July 12<sup>th</sup> & Wednesday August 9<sup>th</sup> in Mellon Institute 348**  
**Thursday July 27<sup>th</sup> & Thursday August 31<sup>st</sup> in Doherty Hall 4303**

To enroll for a class, please go to this link on the EH&S web page to signup:  
[http://128.2.47.78/Training/Class\\_Reg/LSHWclassreq.php](http://128.2.47.78/Training/Class_Reg/LSHWclassreq.php)

## Upcoming Waste Pick-ups

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

From Mellon Institute, 9:30 - 11:30 AM: **July 5\* and July 18, Aug 1 Aug 15 & Aug 29**

From Wean and Doherty Halls, 12:30 - 3:00 PM: **July 5\* & July 18, Aug 1 Aug 15 & Aug 29**

From Porter, Roberts, Hammerschlag and other main campus areas, 9:30 - 11:30 AM: **Jul 6\*, Aug 2**

From PTC: **July 6\*, Aug 2** in the afternoon (**PTC: contact us at 8-8182 if more frequent pick-ups are needed**)

From Penn Avenue and Robotics Engineering Consortium: Next pick-up is **August 17**

Computers will be picked up **July 6 & August 2 (Thursdays)** **PLEASE note that requests must be made by the Friday previous to the pick-up date!!!**

**\*NOTE: Change in day of the week due to the Independence Day holiday.**

***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.***

Do you need hazardous waste supplies such as bottle labels, waste tags or secondary containment? If so, make an on-line request at:

[http://www.cmu.edu/ehs/Waste\\_and\\_Recycling\\_Programs/Haz\\_Waste/hazardouswaste.htm#HWCertTags](http://www.cmu.edu/ehs/Waste_and_Recycling_Programs/Haz_Waste/hazardouswaste.htm#HWCertTags)

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