



LABORATORIES

Health, Safety & the Environment

at Carnegie Mellon University

A Newsletter from Carnegie Mellon University's Chemical Hygiene Officer

October 2006

Training Compliance

With the University's emphasis on ensuring that all persons receive their required Lab Safety and Hazardous Waste training, the issue has come up regarding exemptions to the training. There is only one: Students who have successfully completed the Carnegie Mellon **Chemistry** class **09-221, Laboratory I: Introduction to Chemical Analysis**, do **NOT** need to attend the EH&S Lab Safety and Hazardous Waste training. We have reviewed the considerable safety and waste training aspects of this course and found that they met all of our requirements. We have received the rosters from the past several semesters for this course to confirm attendance and therefore training. **There are no other exemptions.**

Computer Recycling Update:

There are two **very important** updates regarding the University's computer recycling program:

1. **Effective immediately, we will pick-up only computer monitors and CPUs.** We can no longer accept printers, keyboards, mice and other related system materials. Do remember, though, that **we must get ALL of the monitors and CPUs from campus.** The monitors contain sufficient levels of lead that they would be regulated hazardous waste unless they are properly recycled. As for the CPUs, check out the next item...
2. **All CPUs must be turned in as well** to the recycling program not only for the environmental issues associated with the metals and solders within, but also for **data security** reasons. Very few computers on campus are free from confidential or sensitive information and the University must ensure that this information remains secure until properly destroyed. In fact, if certain types of financial or personal identification information cannot be shown to be secure prior to destruction, reports of the incidents must be filed with our Department of Data Security. Further information on this subject will be forthcoming to all of campus in the very near future.

Chemical Hygiene Training Review (Part 5 of 12)

Topic of the Month – Exposure Limits and Medical Activities

In ancient times, Paracelsus stated "the dose makes the poison." This means that for most hazardous materials, the level to which one is exposed determines whether a chemical will cause harm. **How do we know what a "safe" or an "unsafe" level for a chemical exposure is?** One way is to look at the OSHA Permissible Exposure Limit (**PEL**). This value indicates an airborne level of a contaminant, below which no harm is expected to healthy workers, if exposed at that level for an eight-hour work shift. As you might expect, less hazardous materials have fairly high PELs while the more hazardous ones have lower PELs. If a PEL has been established for a chemical, that PEL is given on the MSDS for the material. Under the OSHA Laboratory Standard, we are required to keep exposure levels below the PEL.

While air tests may be taken to determine the airborne level of a chemical to which one is exposed, we seldom do this testing in laboratories. At Carnegie Mellon, scores of people work with scores of chemicals, all in different ways. To perform air monitoring for all these combinations would not be possible. Nevertheless, we are confident that you will have exposures below the PELs if you are working **properly** with a chemical. That is, working with volatile chemicals while using a fume hood, proper handling practices and appropriate protective equipment. We DO perform air monitoring in certain circumstances, such as with very hazardous materials. **If you are concerned about the airborne levels of materials you work with, contact EH&S and we can discuss whether air monitoring is indicated.**

The OSHA Lab Standard requires us to offer "medical consultations" to lab employees in certain circumstances. This consultation involves a discussion with a physician about the situation that produced a possible overexposure. The physician then decides whether further action is needed, testing or treatment, for example. This medical activity is confidential between you and the physician; the employer (Carnegie Mellon) will only get a physician's report of recommendations to follow. Medical consultation will be offered to you in these circumstances:

- ✓ If you develop signs or symptoms associated with overexposure to a chemical
- ✓ If an air test shows you are exposed over the PEL
- ✓ If you were involved in a significant spill or leak of a chemical material

Training Classes

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

Wednesdays: October 11th and November 8th at Mellon Institute 320.

Thursdays: October 26th and November 30th 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 **October and November**:

From Mellon Institute, 9:30 - 11:30 AM: **Oct 10, Oct 24, Nov 7, Nov 20***

From Wean and Doherty Halls, 12:30 - 3:00 PM: **Oct 10, Oct 24, Nov 7, Nov 20***

From Porter, Roberts, Hammerschlag, PTC and other campus locations, 9:30-11:30 AM: **Oct 11, Nov 8**

Penn Avenue and Robotics Engineering Consortium, your next pick-up is **November 21, 2006**

Computers will be picked up on **Oct 12 and Nov 9**

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.

How Are We Doing?

Environmental Health and Safety strives for continual improvement in our services to our campus community. Toward that end we would like you to complete this BRIEF (eight question) survey to help us gauge our success and identify areas where improvement is needed. Thanks in advance for your response!

<http://ehs-alert.fms.bap.cmu.edu/SatisfactionSurvey.php>

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