Protecting MU's Health, Safety, and the Environment **Summer 2006**

notes

ENVIRONMENTAL HEALTH and SAFETY

Shipping Hazardous Materials

The Federal Aviation Administration (FAA) is responsible for ensuring compliance with the Department of Transportation's (DOT) Hazardous Materials Regulations as they apply to transport by air. FAA's special agents conduct inspections and investigations of both shippers who offer hazardous materials for air transportation (e.g., people at MU) , and carriers who accept and transport the hazardous materials (e.g., FedEx, DHL). These special agents can present themselves, unannounced, to inspect a shipper's training records and the shipment records that are required by regulation to be retained.

Individuals on the MU campus have been visited by the FAA at least three times in the last four years for this type of inspection. The special agents examine the shipping papers passing through major regional transport hubs (such as local or regional FedEx offices or Lambert-St. Louis International Airport), then select shippers who will subsequently be visited for a regulatory compliance check. I was a subject of the most recent FAA visit to campus and my records were found to be complete. This unfortunately wasn't the case with all the campus individuals who were inspected during the same visit.

Training is required for anyone who offers a hazardous material for transport. "Hazardous materials" for air transport include dry ice, some diagnostic specimens, gas cylinders (even when empty), and even some chemicals being returned to the manufacturer - whether or not they were opened upon receipt. This training is required by DOT even if the chosen carrier provides all the information necessary to prepare the package. Carriers will often help individuals properly package and label packages in the interest of promoting their business, neglecting to mention the training portion of the shipper's responsibilities.

If you are ever contacted by the FAA or visited by a representative, please do not hesitate to contact EHS - as you should with any visit or contact from a regulatory authority. If you ship materials on dry ice, or ship potentially infectious materials, EHS can provide the requisite training for these. Please contact Jon White in EHS Hazardous Material Services if you have materials for which you are uncertain as to whether they constitute hazardous materials for air transport.

Jon White
Environmental Chemist

In This Issue

Director's Desk

EHS as a Campus Resource

If you visit the EHS web page (http://ehs.missouri.edu), you will read that when you contact EHS for assistance, you should expect that we will:

- Provide prompt, professional service,
- Listen to you to understand your needs,
- Work with you to devise an appropriate course of action,
- Be on your side rather than part of the problem.

Based on feedback that my staff and I receive, we seem to be doing a pretty good job of responding as promised above. This past year we have been very pleased by the numerous requests for assistance we have received throughout the campus. If we were not meeting campus needs, I doubt very much we would receive near as many requests. The best thing about these requests is that they give us an opportunity to work together to create safe working conditions and minimize potential hazards before work is done, rather than responding to accidents after the fact.

This is all to the good; however, EHS does not wish to be complacent about our ability to meet campus needs. There are over 35 professionals in EHS and well over 10,000 campus employees and 28,000 students. It would be very surprising if every single encounter between EHS and the campus community resulted in total satisfaction on everyone's part.

We have several projects in the works to make it easier for you to comply with regulations and work safely. Your feedback is especially helpful as we plan future initiatives. Feel free to contact me (email works best) if you have any requests for EHS consideration. Reports complimenting staff for providing good service are always welcome, and I also welcome suggestions about how we might do a better job in meeting your needs.

Peter Ashbrook

When an Inspector Calls

Most people know that EHS is designated as the primary MU liaison for many regulatory agencies including the Missouri Department of Natural Resources, Nuclear Regulatory Commission, Environmental Protection Agency, Centers for Disease Control and Prevention, Department of Transportation, and the Federal Aviation Administration.

However, these same agencies may not know they should connect with EHS first when they arrive on campus. If an inspector arrives at your workplace – remember the following tips:

- Be polite.
- Be pleasant.
- Ask the representative to wait until you can get an EHS Representative to assist with the visit (Call EHS at 882-7018).
- DO NOT block entry or get into an argument with the inspector.

Remember, regulatory agency personnel have a job to do, just like the rest of us. Thank you for helping MU interact appropriately with inspectors.

Peter Ashbrook
Director

Laboratory Hoods

Most laboratories on campus have them: laboratory hoods. We use them regularly to protect ourselves from explosions and potentially toxic vapors. But what do you really know about your chemical hood? This article will address common questions about laboratory hoods.

How do you know your hood is working? Can you hear the motor running when the hood is turned on; do you feel air moving into the hood? If not, a quick way to check airflow is to open the hood sash to the stop (about 18" open). Hold (don't let go) a tissue or chemical wipe along the bottom of the sash; the paper should be pulled in. Although this method doesn't prove that the hood is operating properly, it does give an indication that the hood is working.

Are you using the hood correctly? The hood is designed to protect the user and laboratory personnel from explosions and noxious vapors/fumes, but only if it's used correctly. When using the hood, place all items at least six inches back from the front of the hood. Except for adding or removing items from the hood, the sash should be in the closed position. If the sash is left open, the hood doesn't capture vapors as effectively and containment of an explosion is lost. The hood is also not the place to store chemicals, solvents, or other items not needed for the current experiment. Some of the newer hoods have a low airflow alarm that sounds when the hood senses insufficient airflow. If the alarm repeatedly sounds when the sash is in the correct operating position (below sash stop) do not tape over the reset button, but rather call Campus Facilities Maintenance to fix the malfunction.

What do the labels EHS places on the front of the hood mean? Once a year EHS checks all laboratory fume hoods for adequate airflow. EHS places two of three types of stickers on chemical hoods. The three types are a 3"x4" green sticker, a 3"x4" red sticker and a 2"x6" sash height sticker.

1) The green sticker will have one of two options checked: either the "Hood meets EHS average face velocity requirements" or "Service Requested. Keep sash as low as possible during operation". EHS will notify Maintenance of all hoods that are out of service. This sticker notes the hood is safe to use if all guidelines are followed.

2) The red sticker states, "HOOD OUT OF SERVICE". This means that the hood is not safe to use and EHS will notify Maintenance to repair this hood.

3) The sash height sticker is placed next to the track of the sash and is used to indicate the maximum sash height (~16") when the hood is in use.

Who should I contact if I have questions about my laboratory hood? The EHS contact phone number is located on all hood stickers. The EHS Website is "http://ehs.missouri.edu/chem/lab-hoods.html". Contact Campus Facilities Maintenance for laboratory hood repairs and malfunctions.

Scott Campbell
Senior Environmental Health Technician

Hazardous Materials Management Hint

Recently we found a lab on campus where the principle investigator places an open box of baking soda in his metal acid cabinets to keep them from corroding. Try this with your own cabinets!

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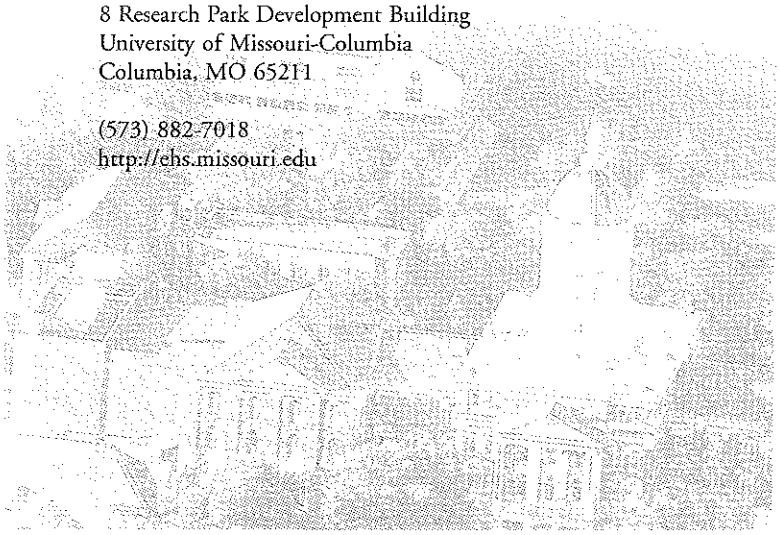

Cobalt-60 Irradiator

This past May, EHS arranged for the decommissioning, moving, and shipping of the University's GR-12 irradiator. This unit contained radioactive sources subject to increased security provisions required by the Nuclear Regulatory Commission (NRC).

For the safety of its students, staff, and faculty, MU elected to dispose of this material in lieu of keeping the unit on campus and implementing the expensive and cumbersome increased security controls that would have been required by the NRC. This project required close coordination and collaboration with personnel from several departments. This planning, flexibility, and coordination allowed the project to proceed to conclusion without a wrinkle anywhere. Therefore, EHS would like to thank all those involved in helping bring this project through to its completion with no lost time accidents, no injuries, no unnecessary exposures, and especially with no loss of control or security risk of the sources being used malevolently.

We would like to provide special thanks to the following persons for their assistance with this project: Marty Walker, Rick Wells, James Fischer and Curtis Christian in Engineering; Carter Roberts from the Research Reactor; Jim Crossley and Jennifer Alexander, Procurement Services; and Doug Schwandt, Jordan Hargrove, Christopher Lynch, Vern Gerling, Brett Barnes, Shawn Spalding, Michelle Lafleur, Bill Elson, Bob Wilson, and Danny Aldridge from MU Police.

Jack Crawford
Assistant Director EHS

EHS appreciates campus support of environmental and safety issues If you have any special needs regarding the format of this publication, or have any comments regarding newsletters, training programs or services please direct your communications to Rebecca Bergfield, Editor at the above address

Food Safety – Friendly Reminder

Now that summer is in full swing, thoughts of cookouts stir in people's minds. These are great thoughts that taste so good. If your cookout is on campus, just remember to request a temporary food permit and, if applicable, an open flame permit. The process is easy. Just go to http://ehs.missouri.edu/food/permits.html for food permits and http://ehs.missouri.edu/fire/open-flames.html for open flame permits. All the information needed is there for the food permit and open flame permit. E-mail the permit information to EHS as directed on the web sites. To be sure your group and you have a very successful, safe, and illness-free cookout, get your request in very early. Let's work together to have a great summer!

Dick Fancher
Sanitarian