

ANNOUNCING!

On-line Bloodborne Pathogen Refresher Training

This is a new course offered by OSEH to provide annual refresher training for research laboratory personnel who may reasonably anticipate contact with blood or other potentially infectious materials, including human cell lines during the performance of their duties.

***Note: Laboratory personnel must receive initial training for Bloodborne Pathogens through the OSEH "Comprehensive Laboratory Safety" Course. The refresher training by no means is a substitute to this training.**

The refresher training is offered through the OSEH website at <http://www.oseh.umich.edu/BBP06.pdf>

To receive credit for your annual BBP refresher training you must:

- Review the on-line course material
- Complete the exam at the end of the course
- Print a copy of exam and provide it to your Supervisor
- Ensure this training is documented in your Exposure Control Plan

It is the responsibility of each PI to assure that their employees are trained and that a record of that training is maintained.

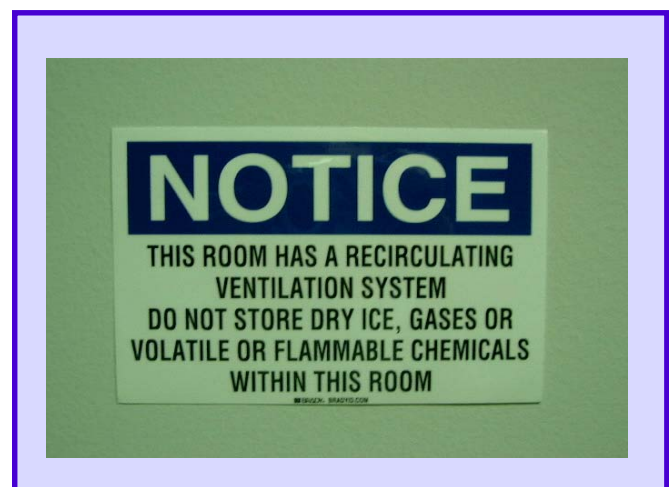
Environmental Room Door Markings

The storage of certain hazardous materials in an inappropriate location may present a safety or health hazard to occupants of the space. Improper ventilation in rooms where chemicals or gases are located may present a hazard from the toxic or ignitable properties of the material, or from their ability to displace oxygen.

Many environmental rooms are designed like a large refrigerator or oven in that they just recirculate air; they do not have a fresh air supply and exhaust ducts to remove the hazardous conditions.

As an aide to remind individuals of this design feature and potential hazard in environmental rooms, OSEH now has available stickers that can be placed on the door to the room, shown below.

If you are interested in obtaining the sticker please contact your OSEH representative or the main OSEH office at 647-1143.



Working Safely with Biological Wastes

Operations at the University generate a significant amount of waste product and because much of the research on campus is in the biological sciences, many people on campus handle biological waste materials. These types of waste can include:

- Cultures and stocks of infectious agents, including laboratory waste, biological production wastes, discarded live and attenuated vaccines, culture dishes, and related devices.
- Liquids of human or animal origin, including blood, blood products and body fluids.
- Pathological waste including organs, tissues, products of conception, and fluids removed by trauma, surgery, autopsy or other medical procedure, that are not fixed in formaldehyde.
- Contaminated waste from animals that have been exposed to agents infectious to humans; these being primarily research animals.

To protect workers, the Michigan Occupational Safety and Health Administration and the Department of Environmental Quality regulate how these wastes are handled, stored, collected and destroyed. The following tips can assist you with the proper handling of biological materials and complying with these regulations.

- As soon as a laboratory begins using a waste container for biological materials, it must be marked with a biohazard sticker. Biohazard stickers are available from OSEH.

- In addition, the container must be marked with the accumulation start date – i.e. the date when the first waste is added to the container. This is required because regulations do not allow accumulation on campus for more than 90 days before being sent for proper disposal. To facilitate compliance, OSEH will soon supply biohazard stickers with an accumulation start date field on the sticker.
- Since biohazardous waste must be removed from campus or treated within 90 days of the accumulation start date, please call OSEH for a pick up as soon as the container is full or at 60 days from the accumulation start, whichever is sooner, to allow adequate time for removal from campus. If your laboratory treats and disposes the waste through autoclave or chemical disinfection, you must complete the disposal before the 90 day limit is reached.
- All sharps must be placed in a puncture proof container to prevent injury to those handling the waste. All sharps containers must be labeled with a sharps sticker. Sharps containers and stickers are available in a variety of sizes from OSEH.

By implementing and following these tips, your laboratory can help maintain a safe and compliant campus environment. If you have any questions regarding biological wastes or sharps disposal and/or need waste containers or labels, do not hesitate to contact OSEH at 763-4568.

Disposal of Liquid Scintillation Vials

Liquid scintillation counting is primarily used at the University of Michigan for analysis of research samples and monitoring of equipment and areas for contamination control. To promote safe use and control disposal costs OSEH has recommended procedures for use, collection and disposal of vials containing liquid scintillation cocktail.

OSEH maintains a list of approved liquid scintillation cocktails for use at the University. It is important to use only approved cocktails to facilitate proper and economical disposal of the waste. The list is on OSEH website:

<http://www.oseh.umich.edu/appfluid.html>.

Disposal of used vials containing liquid scintillation cocktail is described in the OSEH guidance document "Proper Segregation and Disposal of Low-Level Radioactive Wastes (LLRW) at The University of Michigan" which is issued to each Authorized User in the Radiation Safety Binder and is on our website

<http://www.oseh.umich.edu/segreg.html>.

Proper segregation and collection of scintillation vials helps ensure compliance with disposal regulations and controls the cost.

Some of the key points to remember are:

- Used scintillation vials must never be discarded in the yellow drums provided for solid low level radioactive waste. This applies to all vials whether they contain scintillation cocktail or not.
- Collect used scintillation vials in sturdy cardboard boxes. If you purchase vials in trays, return the used vials to the trays, and the trays to the original box. This helps keep the vials in an upright position and minimizes spillage during pickup and transport. If you purchase vials in bulk, line the collection box with 2 layers of

plastic bags or blue pads. Ensure that each vial is securely closed before placing them in the disposal container.

- Collect plastic and glass vials separately. Collect vials by the segregation categories listed in the "Proper Segregation and Disposal of Low-Level Radioactive Wastes" manual. Briefly, you may combine H-3 with C-14; you may combine S-35 with I-125; and always collect P-32 by itself. Consult the manual or call OSEH at 763-4568 if you are working with other isotopes.
- Collect only used scintillation vials in the scintillation vial collection box. Do not put stock vials or solid radioactive waste (gloves, pipette tips, test tubes, etc.) in the collection box.
- Prior to requesting a waste pick up, perform a contamination survey of the exterior of the collection box and properly complete the Low Level Radioactive Waste (LLRW) manifest.

Following the above guidelines and consulting the disposal manual will help to ensure the safe and economical use, collection and disposal of vials containing liquid scintillation cocktail. Call OSEH Environmental & Hazardous Materials Management at 763-4568 when questions arise.

Properly Managing Asbestos Floor Tiles

OSEH has recently received questions from several office occupants and facility managers regarding floor tiles that have been damaged by the hard castors on office chairs. In some offices hard chair castors may actually grind on the floor tiles. Floor tiles (both 9" x 9" and 12" x 12") may contain varying concentrations of asbestos, typically less than 10%, that under normal use pose no threat to facility occupants. The question is whether or not the tiles being damaged by the chairs may cause a fiber release. Air sampling studies coordinated by OSEH industrial hygienists show that potential asbestos containing dust from damaged floor tiles is not releasing fibers into the facility occupants' breathing zones during office activities. While the industrial hygiene measurements do not indicate an employee health issue is present, it is still important to maintain flooring in good condition.

How to Recognize Damaged Floor Tiles

Floor tile damage caused by chair castors usually occurs as a circular wear pattern under an office chair. Damaged floor tiles have a dull, un-waxed, white, or grainy appearance. If you see this type of damage to floor tiles in your work area, contact your Facility Manager or OSEH immediately for assistance in choosing the best way to solve the problem.

Facility Manager Role in Managing Damaged Floor Tiles

Facility Managers should identify areas where floor tiles are damaged and contact OSEH to discuss any or all of the following options for addressing the damage to floor tiles and preventing future damage.

- To avoid the potential for generating dust from the tiles do not dry sweep damaged

tile areas.

- Replace the chair castors with the softer type intended for wood floors. Hard castors that are removed should not be salvaged for reuse onsite.
- Place a hard plastic mat over the worn area.
- Wax the floor (or just the circular worn area) and ensure that Building Services has access to every office during periodic floor waxing.
- Rearrange offices to avoid further wear on already worn floor tiles.

OSEH does not recommend replacing floor tiles damaged by chair movement unless the tiles are broken or cracked. When ordering new chairs, select those with softer castors (those intended for wood floors) if the chairs will be used on tile flooring. The Purchasing Department or Interior Design can assist you in selecting the appropriate castors. If you have further questions please contact OSEH Industrial Hygiene & Safety at 647-1142.

New Refrigerant Management Program

Old refrigerators, freezers, air conditioners, and ice making machines, no longer useable by University units, have historically been sent to Property Disposition and re-sold to the general public. Since most of the equipment was very old it was extremely energy inefficient, and excess energy consumption is both costly to the purchaser and environmentally problematic as it contributes to greenhouse gas emissions. Because of this, over 50% of this equipment was not being purchased by the public, but instead ended up at scrap metal dealers. It was unclear whether the scrap metal companies were properly removing and recycling the refrigerants (chlorofluorocarbons or CFCs) from the units prior to scrapping them.

Because of the loss of control over the CFC reclamation and the resource stewardship, the University is implementing a new refrigerant-containing equipment management program. The new program is structured as follows:

- All refrigerant-containing equipment including: all sizes of refrigerators, freezers, air conditioners, and ice makers manufactured within the last 7 years can be sent to Property Disposition for resale to the general public.
- All refrigerant-containing equipment that is **older than 7 years** must be sent by the unit to Plant Operations Air Conditioning Shop where the refrigerant will be properly evacuated and recycled. After the refrigerant has been removed the unit will be sent for scrap metal recycling. Plant Operations Moving and Trucking should be contacted to move the equipment to the Plant Air Conditioning shop.
- All departments are responsible for the cost of transporting their equipment to Plant Operations Air Conditioning, or Property Disposition, via Moving and Trucking.

- OSEH will cover the Plant Operations cost for refrigerant removal for all units coming from General Fund facilities. Non-General Fund operations must cover the cost of the refrigerant removal from the units and should provide the Plant Operations Air Conditioning Shop with appropriate chart fields for the cost.
- Following removal of the refrigerant from the units, Plant Operations will send the units for scrap metal recycling.

This program will help the University maintain compliance with CFC disposal regulations, and become a good environmental stewardship program. Any questions regarding this new program should be directed to Andy Berki at aberki@umich.edu, or 647-3120.

Thoughts from the Director

By Terry Alexander

Ahh, summertime at last! A time to kick back, relax, party with the family - picnics, barbeques, outings at the beach. Also a time for many to catch up on all those chores at home - all the little projects that piled up over the winter. But also a time to remember all of those great safety reminders from work. You know the ones about proper food safety, working with power equipment, protection from the mosquitoes and UV rays! Personal safety is as important for you at home as it is at work - perhaps more so in that you don't have an OSEH department helping you at home. We ask that you please be careful in all of your activities and get ready for another exciting year.

So what do we have coming this next year at the University? Perhaps the biggest deal will be preparation and planning for avian flu. Over the summer all campus units will begin planning for business and academic continuity contingencies. In the fall the influx of students from around the world and the myriad of campus activities will mean a heightened awareness among the public health agencies including the hospital, University Health Service, and OSEH. But then again, we all hope the planning will be like Y2K - a swirl of activity leading up to a non-event! So life goes on as normal - major construction around campus, new lab buildings opening, new research initiatives, and more. The same old hectic pace we've all grown accustomed to over the last several years. In the midst of all this activity, please remember that OSEH is here to partner with you to make it a safe and compliant year.

Contact Information

Ann Arbor Campus:
Occupational Safety & Environmental
Health
1239 Kipke Drive
Ann Arbor, MI 48109-1010
(734) 647-1143

Dearborn Campus:
Campus Safety & Security
CSS
Dearborn, MI 48128
(313) 593-5333

Flint Campus:
Env. Health & Safety
204 University Pavilion
Flint, MI 48502
(810) 766-6763