
ENVIRONMENTAL HEALTH AND SAFETY



Mergers and Acquisitions

Having survived a months-long study by Draper and Associates with a very positive assessment, the Environmental Health and Safety Office (EH&S) has acquired responsibilities and assets formerly assigned to the Employee Safety and Health Office. Along with the expanded responsibilities, EH&S reporting lines moved from the Vice President for Research to the Vice President for Business and Finance.

One of the big benefits of the merger is the expanded team of EH&S personnel who will be assisting you. That team includes a fire protection specialist, industrial hygienist, and student workers. See more about new personnel on page 2.



Environmental Health and Safety Staff
John Rider (left), Tom Eadie, Jennifer Tichenor, Eric Swauncy, and Erik Tyge

We look forward to offering you a wider variety of services with our traditional promptness, courtesy, and professionalism.

Laboratory Health and Safety Seminar

The Laboratory Health and Safety Seminar will be presented on Thursday, August 27, from 1:15 p.m. until 4:15 p.m. in 102 J. M. Smith Hall. New this year is an option for personnel who recently attended the full seminar to enter the lecture hall between 3:00 and 3:15 p.m. for hazardous waste training.

We promise to deliver the usual laughs, sighs, gasps, and refreshments. Come enjoy learning about laboratory safety, and bring a colleague with you.

Fume Hoods Continue to Protect

If used properly, fume hoods are the primary means of protecting laboratory personnel from hazardous air contaminants, and they provide a physical barrier between personnel and unexpected releases of energy that could cause serious injury or death.

Of the 200 fume hoods tested on the Main Campus last year, 198 passed annual testing by EH&S, providing assurance that the hoods met national and University performance standards. The two hoods that failed testing were quickly repaired and now meet standards. These test results also demonstrate the effectiveness of the preventative maintenance program for laboratory ventilation systems.

Now that we know the hoods are working, the rest is up to you:

Use your hoods properly by following guidance provided in our [Quick Guide to Laboratory Fume Hood Use](#), and view the [Fume Hood Tutorial](#) on our web site.

Report all fume hood failures to Physical Plant by filing a work order or calling 678-2699.

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New People in EH&S

Thomas Eadie joined EH&S in April as our new fire protection specialist. Tom recently retired from a similar position with the Florida Fire Marshal's Office, where he was named the 2014 Fire Inspector of the Year for the State of Florida.

Tom is no stranger to a university campus, having worked for the University of Florida. Give Tom a call at 4671 to discuss fire safety issues or to request fire extinguisher training.

Jennifer Tichenor, the new senior administrative secretary, joined EH&S in June. Jennifer is working on her degree in marketing. She may be reached at 5700.

Eric Swauncy reported to work in early August to become our new laboratory safety specialist. Eric's background is in analytical chemistry, having worked as a chemist for many years in the private sector. Contact Eric at 1625.

John Rider is the Coordinator, Occupational Safety (industrial hygienist). John holds a Master's degree in Business Administration and is a Certified Industrial Hygienist. He has experience in academia and industry. John's phone number is 2740.

Get Ready for Annual Chemical Inventory

If you are not using Chematix, you will soon receive an annual hazardous material inventory packet. Be sure to complete and return your signed, updated inventory by the requested date. Remember to use the inventory process as an opportunity to remove unwanted and outdated chemicals for disposal. Yes, we hate this process almost as much as you do.

Make life easier by moving your chemical inventory to Chematix. Call 2044 for more information.

A Wedge between You and Safety

We suspect that everyone has seen a fire door held open with a wedge or heavy object (see photo). It seems so innocuous that we think nothing of it; however, that wedge or doorstop can create a disaster.



Holding a fire door open with a wedge or doorstop puts lives at risk

Fire doors are intended to create a barrier to heat and smoke from a fire. Doors to stairwells are especially important because they help ensure a safe pathway to exit the building and a place of refuge for those who are physically unable to exit. If you wedge open a fire door, you put people and facilities at risk by allowing fire and toxic gases to spread throughout a building.

Only use wedges and doorstops for briefly holding doors open, removing them immediately afterward.

Injury/Illness Reporting Process

Just in case you experience a work-related injury or illness, please remember that new procedures were put in place after the State of Tennessee hired a new Workers' Compensation claims management contractor. So, let's take a look at the process.

For non-emergency work-related injuries and illness, you must contact the Workplace Injury and First Notice of Loss Call Center at 1-866-245-8588. A Call Center nurse will assess your condition via phone; if it is determined that you need medical treatment, you will be directed to the nearest approved medical provider. Failure to utilize this process for non-emergency medical treatment will likely leave you responsible for paying the medical bills.

In addition to the phone call, please file a "First Report of Injury or Illness" form with EH&S.

Learn about the occupational injury and illness reporting process now; it's much less stressful than waiting until after you have an accident.

New Guidance for Research Lab Safety

If you are a long-time reader of this newsletter, you will recall that the U.S. Chemical Safety and Hazard Investigation Board (CSB) launched its only investigation into academic laboratory accidents following a January 7, 2010, accident in which a Texas Tech University graduate student was severely injured in a lab explosion.

The CSB's report included a recommendation that the American Chemical Society (ACS) "develop guidance for assessing and controlling hazards in research laboratories." Well, ACS delivered, creating "Identifying and Evaluating Hazards in Research Laboratories," a document packed with useful tools that can help you maintain a safe environment for research. (See page 7 of the ACS document for a UofM connection.)

Take time to read "Identifying and Evaluating Hazards in Research Laboratories," then apply some of the included tools to your lab.

Employee Injuries Summary for 2014

There were 40 on-the-job injuries at UofM during 2014, resulting in employees missing 210 days of work and experiencing an additional 622 days of job transfer or restriction. These 40 injuries resulted in total expenditures of \$387,985.43 for lost-time wages, disability payments, and medical expenses. Of course, money and words can't negate the pain associated with those injuries.

It may surprise you to learn that the primary causes for these injuries were slips, trips, and falls. The next highest category was related to musculoskeletal overexertion, usually while moving objects.

Watch your step, avoid walking through areas that are obviously slippery or treacherous, and follow guidelines from the Centers for Disease Control and Prevention when moving objects.

OSHA Standards Not Adequately Protective

The U.S. Occupational Safety and Health Administration (OSHA) has acknowledged that its chemical "exposure standards are out-of-date and inadequately protective."

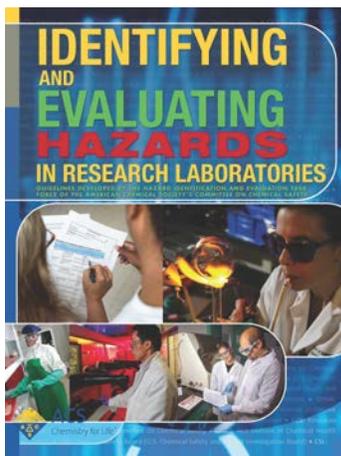
Along with the above acknowledgement, OSHA released Annotated Permissible Exposure Limits (PELs) allowing voluntary adoption of more protective workplace exposure limits that incorporate scientific data, industrial experience, and technological developments occurring since the original PELs were issued over 40 years ago. The tables are available on the OSHA website.

Using Your Cell Phone in a Laboratory or Clinical Setting?

Cornell University EH&S has several short safety videos on YouTube, and one of them demonstrates how cell phones can lead to unwanted consequences in the lab. [Click here to take a look.](#)

If you absolutely must use that smartphone in a lab or clinical setting, try placing it in a small Ziploc-style bag. Carefully removing the phone from the bag prior to leaving the lab helps you avoid those unwanted consequences.

Avoid taking your work home with you: wash your hands before leaving the lab, shop, or studio.



Useful Contacts

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|---|---|
| Director, EH&S | 678-4672 |
| Radiation Safety Officer | 678-4672 |
| Hazardous Materials Specialist | 678-2044 |
| Laboratory Safety Specialist | 678-1625 |
| Occupational Safety Coordinator | 678-2740 |
| Fire Protection Specialist | 678-4671 |
| Fax | 678-4673 |
| Emergency (Fire, Police, Ambulance, after hours Chemical/Radiological) | 678-4357 |
| EH&S Web Page ... | http://ehs.memphis.edu |

Scary Incidents at Other Institutions

Michigan State University

A July 2015 explosion at MSU blew the door off a refrigerator, broke windows, and caused evacuation of several rooms in Giltner Hall. *The Detroit News* reported that an unsealed container of isopentane was being stored in a refrigerator when vapors ignited explosively. No surprise there!

Flammable liquids should only be stored in refrigerators that are designed for flammables storage, and unsealed containers of flammables are a tragedy waiting to happen.

Seal 'em up, and store 'em right.

University of Utah

DeseretNews.com reported that an April 2015 chemical reaction inside a flammables storage cabinet resulted in an explosion, blowing off one of the cabinet's metal doors and causing a fire that was suppressed by the building sprinkler system. Personnel from Utah reported that the contents of storage cabinets will be scrutinized carefully during inventory and appropriate action taken to minimize chances of similar incidents.

Those flammable and corrosive storage cabinets are not intended to protect against events originating within the cabinets; they are designed to protect the chemicals from what happens outside (e.g., fire). Never store incompatible chemicals together, and check for chemicals that are old or in poor condition during your annual inventory.

Texas Tech University

According to TTU, three undergraduate students and a TA required medical attention after a glass waste bottle exploded in a teaching lab earlier this year. The bottle was found to have contained methanol, dimethylglyoxime, and nitric acid. The incompatible mixture caused build-up of sufficient pressure to break the bottle.

Never combine nitric acid with organic solvents!

Don't Lick Your Desk

The Cleaning Services Group, a UK company, created an infographic called "[How Clean is Your Work Space.](#)" It makes for interesting reading; however, if you are squeamish about germs, have some sanitizer handy before you click on the link.



Hazardous Waste Costs Continue to Climb

Analysis of hazardous waste costs incurred by the University during calendar year 2014 revealed expenditures in excess of \$164,356.62. Amazingly, only \$21,476.10 was spent for packaging, transportation, and disposal of the

wastes. The remaining costs were associated with labor by UofM employees (\$132,227.50); fees paid to the Tennessee Department of Environment and Conservation; supplies, postage, and related items; and employee training.

If your department generates hazardous waste, don't forget to implement the strategies in your hazardous waste reduction plan. Implementing those strategies will help protect the environment and contain costs.

Environmental Health & Safety Staff

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