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# ENVIRONMENTAL HEALTH AND SAFETY

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THE UNIVERSITY OF  
**MEMPHIS**

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## Emergency Preparedness is High Priority

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A number of emergency preparedness initiatives have been or are being completed. Among the most visible initiative is the new outdoor emergency warning system that will provide audible alerts via speaker trees (see photo at right) on the main and Park Avenue campuses. In addition to attention-getting tones, the system will provide verbal notification of dangerous weather and other situations. You will become familiar with the system through periodic tests.

The University has a new text messaging emergency notification system that students, faculty, and staff may participate in. If you would like to receive emergency notifications via text messages, you may sign up at <http://tigertext.memphis.edu>.

An amateur radio station is also being installed on campus. When all other means of electronic communication fail, licensed amateur radio operators (hams) will use the station to maintain communication locally, regionally, nationally, and internationally.

And if that is not enough for you, major University units have prepared business continuity plans for implementation in major crises. Plans created over the summer address an influenza pandemic while containing many of the structural elements that are needed for response to other crises. Planning will be an on-going process.

Our thanks to all who have worked so hard on preparing the University for crises. We especially thank members of the Crisis Management Team Operations Group, Business Continuity Committee, and Mr. Charles Lee, vice president for business and finance.

### Some Texas A&M Research Halted by CDC

Texas A&M University, one of only a handful of universities receiving grants from the Department of Homeland Security to conduct research with biological materials known as “select agents,” was recently ordered by the Centers for Disease Control and Prevention (CDC) to halt all research with select agents due to incidents in which employees were exposed to Q fever and infected with brucellosis. This situation was particularly troubling to CDC because the exposures were not reported to the federal government until the Sunshine Project made the events public. An article in the *Chronicle of Higher Education* noted that 120 lab workers in five labs were impacted by the order.

It is widely speculated that the CDC action was a factor in elimination of A&M from consideration to receive a \$4.5 million biodefense lab that may employ over 300 people.



UFOs? Nope, just transducers used in the new outdoor warning system. Photo by Federal Signal.

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## Wet and Wild Summer

With funding identified by the Provost's Office, several laboratories received new emergency showers and/or eyewashes this summer. In addition, EH&S has tested all showers and eyewashes to ensure that all are in tip top condition.

Whether you have a new eyewash or an old one, don't forget to flush it weekly and document the test. Failing to flush the unit allows sediment to accumulate in the water line and promotes growth of bacteria and protozoa that can be harmful. Here's to no mud in your eye!

*Are you flushing your eyewash weekly?*

## Pipettors and Repetitive Strain Injury

The June, 2007, issue of *Occupational Safety and Health* includes an article on the potential for repetitive strain injuries when using manual pipettors for extended periods. Joan G. Erickson and Anthony V. Smith noted in the article that the National Institute for Occupational Safety and Health has identified repeated pipetting as a common contributing factor associated with repetitive strain injuries in labs.

Erickson and Smith noted the following factors as worthy of consideration when selecting a pipettor:

- Weight (Less weight obviously requires less muscle force.)
- Length (Shorter pipettes require the hand and arm to be raised through a smaller arc.)
- Balance (Good balance requires less application of torque.)
- Hand fit (Comfortable grip reduces muscle strain.)
- Ease of adjusting volume (Not too loud! - Sorry, we couldn't resist a little levity.)
- Ease of reading volume (Eye strain and errors are reduced.)

EH&S recently acquired a demo pipettor that appears to have very good ergonomic properties. If you would like to see our demo unit, please give us a call or come by the office.

## Lab Safety Seminar Time

Our famous Laboratory Health and Safety Seminar is scheduled for Wednesday, August 29, 2007, from

1:15 p.m. until 4:15 p.m., in the Ellington Hall Auditorium. In addition to retaining the basics, we have revised the presentations and added new material to help you work more safely in the lab. The seminar will help satisfy your departmental training requirements, including those for employees who generate hazardous waste.

To help ensure that we have sufficient cookies, drinks (go easy if you are driving), and door prizes, faculty, staff, and graduate students should register through their departments by August 27.



Do your students know how to use this new eyewash/drench hose unit?

## Placards Updated

EH&S recently updated 166 door placards on labs and other areas. The new placards accounted for changes in department chairs, PIs, supervisors, and types and quantities of hazardous materials. Areas with very small quantities of hazardous materials were generally not placarded. If you have questions about the placard that you received, please call EH&S at 2044 or see <http://ehs.memphis.edu/umhaz2.htm>.

## Biowaste Disposal Made Easy

Did you know that it is very easy to properly dispose of your full sharps containers and other biohazardous wastes? It is as easy as calling Katherine Miller at 2740. With the exception of units that schedule their own pickups due to high volume generation, Katherine can schedule a Stericycle pickup for you. The service is free for units that generate small volumes of biohazardous waste.

***Place all sharps in approved containers for disposal.***

## Hazardous Waste Costs Reported for 2006

The University of Memphis incurred costs in excess of \$145,712 during calendar year 2006 as a result of hazardous waste generation. This figure includes only \$29,388 in direct disposal costs; the remaining costs include internal labor, training, postage, supplies, and fees and penalties paid to regulatory agencies.

Disposal costs for scheduled pick-ups in 2006 ranged from \$9.54 per kilogram to \$16.56 per kilogram. Overall, the cost per kilogram of waste shipped has risen significantly. Price increases and new waste streams promise to further increase disposal costs in 2007 and beyond.

*Please do your part to contain waste costs.*

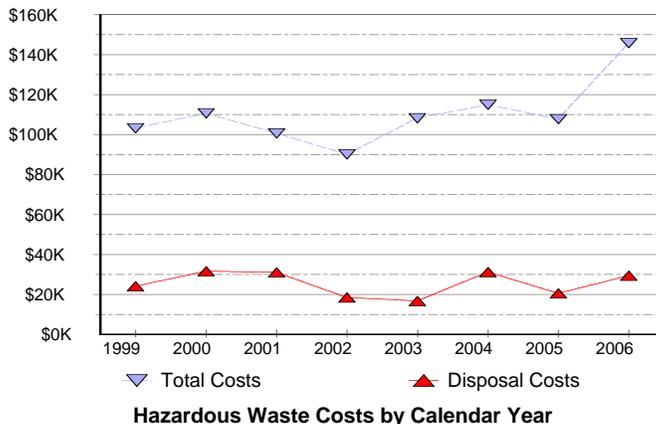
## Lab Fires from Around the Nation

*The News Journal* reported that a small chemical explosion in June led to the injury of two Delaware State University students and the evacuation of a science building. The published report indicated that the accident occurred when acetone and ethanol were mixed with nitric acid. Let's see, we mix two flammable liquids with an acid that is an oxidizer - that spells exothermic reaction to us.

A geology lab at the University of Vermont was the source of a two alarm fire in May. A report in the *Front Porch Forum* noted that an unattended experiment in a fume hood was using hydrofluoric and perchloric acids to dissolve quartz. When firefighters arrived, the entire lab was full of black smoke. Although the sprinkler system was discharging water, firefighters had to knock down the fire in the hood with handheld hose lines. Fourteen firefighters and two police officers were decontaminated at the scene, transported for medical evaluation, and later released.

## U of M Commits to Sustainability

President Raines recently committed the University to move toward a more environmentally sustainable campus. In addition to the official commitment to sustainability, the student sponsored Environmental Action Club promoted a "Green Power Initiative" (<http://www.voteyesforgreenpower.com>); students, faculty, and staff met frequently during FY 06-07 to discuss promotion of environmental sustainability on campus; and the Art Department became heavily involved in building a sustainable house in Memphis.



Get more information on U of M environmental sustainability efforts, including recycling, at <http://greencampus.memphis.edu>.

## Pandemic Influenza Training On-line

A new on-line video is available to provide employees with information on avian influenza pandemic preparedness. The 15 minute video is available at <https://itweb2.memphis.edu/pandemictrain/loginptrain.php>. Why not take a few minutes and learn more about this very important topic.

*Is your department prepared for a pandemic?*

### Sources of Assistance

Director of EH&S . . . . .	678-4672
Radiation Safety Officer . . . . .	678-4672
Chemical Hygiene Officer . . . . .	678-4672
Environmental Protection Specialist . .	678-2044
Laboratory Safety Specialist . . . . .	678-2740
Fax . . . . .	678-4673
Emergency (Fire, Police, Ambulance, after hours Chemical/Radiological) .	678-4357
EH&S Home Page . . .	<a href="http://ehs.memphis.edu">http://ehs.memphis.edu</a>

## UVI Spends \$119,000 in EPA Settlement

The University of the Virgin Islands (UVI) is settling multiple violations of the Resource Conservation and Recovery Act by spending \$99,000 on environmental improvement projects and paying a \$20,000 fine to the U.S. Environmental Protection Agency (EPA).

EPA had cited UVI for failing to perform waste determinations, improperly storing hazardous waste, improperly labeled waste containers, failure to perform weekly inspections, and more.

EPA reported that FY 2006 enforcement efforts resulted in imposition of 154 years of jail time, almost \$43 million in fines, and \$129 million in environmental improvement projects due to violations of environmental laws and regulations.

*Are you protecting personnel, the environment, facilities, and fiscal resources by properly managing your hazardous waste?*

## Welcome, Kenya!

Please join us in welcoming Kenya Sanders as the new administrative secretary in EH&S. Kenya has considerable experience from the private sector and is familiar with U of M policies and processes. She is a part-time student who is working toward a degree in biology. You may contact her at 5700.

## New Radiation Safety Requirements

The Tennessee Division of Radiological Health recently issued new regulations that require the registration of devices that contain certain quantities of radioactive material. If you have an analytical instrument or other device with a radioactive source, please contact Al Simpson at 4672.

*Do you know your rights and responsibilities under University Policy UM1293? Better start reading.*

## NY Art Teacher Injured in Mixer

*ACTS Facts*, a monthly arts safety publication, recently noted that a Yonkers, New York, art teacher's arm was caught in a clay mixer. She was flown to a hospital after emergency personnel spent approximately an hour removing the mixer's shaft to free her.



*Are you reducing, reusing, and recycling?*

A proper guard would have prevented this accident. Whether it is a mixer, compressor, vacuum pump, or other piece of mechanical equipment, don't forget to ensure that all guards are in place.

## UW Professor Pleads Guilty in Waste Case

The *Seattle Post-Intelligencer* reported that 62 year old University of Washington pharmacology professor Daniel R. Storm pleaded guilty to federal charges related to improper disposal of hazardous waste. Storm faced up to five years in prison and a \$250,000 fine as a result of his apparent dumping of flammable liquid waste down the drain.

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## Environmental Health & Safety Staff

Alton Simpson, Director  
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Frank Williams, Environmental Protection Specialist  
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