### Georgia Tech-Environmental Health & Safety



# EHS BUZZ

Fall 2008

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### FROM THE AVP

Dear Colleagues and Valued Customers,

EHS is pleased to present our Fall Semester 2008 Newsletter. Hopefully, this new format, which includes summaries of our individual EHS Office

activities, recent EHS incidents and our upcoming training calendar will be useful to you and add value to your operations.

Best Wishes for an outstanding Fall!

Mark Demyanek, AVP EHS

### FAA VISIT AND NEW SHIPPING GUIDELINES

On August 13 and 14, 2008, the Federal Aviation Administration (FAA) conducted an unannounced inspection of EHS and several lab groups here on campus. The FAA stated that they were conducting a random "Dangerous Goods" shipping inspection. "Dangerous goods" are hazardous substances that are regulated in transportation by the FAA and the US Department of Transportation (DOT).

Shippers of dangerous goods must be trained in classification, packaging, security, and safety. To ease the compliance burden on individual departments, EHS runs a centralized dangerous goods shipping program for the campus and has several employees who are trained to ship these materials. This program has been in-place for several years.

The FAA spent approximately two days reviewing records in the EHS office and interviewing laboratorians who bring dangerous goods to EHS for shipping. The FAA determined that an additional level of "awareness" training was needed for individual laboratorians who offer dangerous chemical and/or biological materials to EHS for shipping. The FAA also found that the required shipping training log maintained by EHS was not in the format they prefer.

EHS immediately took corrective action and developed an "awareness level" training module for laboratory personnel that covers the required items and also provides a "hands-on" component to develop function-specific knowledge. All persons involved in the process of packaging and bringing chemical and biological shipments to EHS will need to be trained. Chemical shippers should contact Ryan Lisk at ryan.lisk@ehs.gatech.edu and biological shippers should contact Lisa Brindel at

lisa.brindel@ehs.gatech.edu for training. **Biosafety:** The new Occupational Health Program was launched this summer. The program is open to researchers and other Georgia Tech employees who have exposure to occupational health risks. The initial emphasis is on enrolling employees who come into contact with laboratory animals and biological materials. Also, the annual biosafety cabinet certifications were completed in July.

**Chemical Safety:** The Chemical Safety Office is hard at work implementing the new Chemical Tracking Policy. The policy requires that all campus departments use the Chematix system to track chemical inventories. The group is also working to complete annual fume hood certifications in a number of buildings.

Chemical Safety has a new face in their ranks. New Chemical Safety Specialist, Mr. Ryan Lisk, comes to Tech with a B.S. in Biology from Kennesaw State University. It's a good thing that Ryan was hired because two weeks later the other Chemical safety Specialist, Vanessa Keel, announced that she was leaving to accept a new position as Chemical Safety Coordinator at Kennesaw State University. This is a great opportunity for her, but she will be missed greatly around the office.

**General Safety:** A new General Safety Manager has been hired to replace Alton Chin-Shue, who left Georgia Tech this past spring to take a job with the FAA. Ms. Aleece Foxx comes to Tech from the Coca Cola Company were she worked as a Safety, Health and Environmental Coordinator in one of their production facilities. Aleece has a B.S. in Industrial and Systems Engineering from the University of Southern California. She is busy updating and implementing safety programs to protect Georgia Tech employees and students. These programs include permits for hazardous work activities as well as a Comprehensive Loss Control Program to meet new state requirements. Safety training programs are also being conducted for various departments across campus to reenforce safety knowledge and clarify requirements.

Hazardous Materials: The backlog of waste pick-ups and processing created by the EPA Audit "surge" has been completed. As always the EHS Hazardous Materials Office is ready to handle waste disposal needs by accepting chemical, biological, universal, and other regulated wastes. In addition, work is continuing on the Institution's Spill Prevention Control and Countermeasure (SPCC) Plan.

**Fire Safety:** The Fire Safety Office has been conducting fire inspections of all campus building with special emphasis on Greek Houses and Residential facilities. In addition, they staged a special Fire Safety Month event in September that included a "mock dorm room fire" The event drew over 500 students and received significant media coverage.

The Fire Safety Office also has a new face. Ms. Jennifer McWhorter has joined EHS as a Fire Safety Specialist. Jennifer comes to EHS from the City of Atlanta where she served in several different roles that focused on fire safety inspections and training.

**Radiation Safety:** The Radiation Safety Office is currently working on revising the current X-ray Generating Equipment (Device) Safety Rule for the campus. Radiation Safety will also be sending out Form A renewals to authorized users in the coming weeks. The Radiation Safety Committee completed the Annual Radiation Safety Audit in June.

### **Holiday Turkey Frying**

It's drawing close to the holiday time of year again. The weather is starting to turn colder and the geese are heading south for the winter. Its also getting close to the season of merriment and parties. This time also brings out those turkey fryers. Fried turkey could be a lot of fun and pretty tasty, but before you do that let's discuss turkey frying safety. Grills or turkey fryers **must** be at least 15 feet away from any building or structure. Turkey fryers reach extremely high temperatures and have been known to explode into flames. Frying in garages, under overhangs, under patios or porches, and under gazebos is not recommended. Never leave your turkey fryer unattended with children around. For the safest operation when deep frying a turkey follow these guidelines:

- Make sure there is at least 2 feet of space between the liquid propane tank and fryer burner.
- Place the liquid propane gas tank and fryer so that any wind blows the heat of the fryer away from the gas tank.

- Center the pot over the burner on the cooker.
- Completely thaw (USDA says 24 hours for every 4 to 5 pounds) and dry turkey before cooking. Partially frozen and/or wet turkeys can produce excessive hot oil splatter when added to the oil.
- Follow the manufacturer's instructions to determine the proper amount of oil to add. If those are not available:
  - 1. Place turkey in pot
  - 2. Fill with water until the turkey is covered by about <sup>1</sup>/<sub>2</sub> inch of water
  - 3. Remove and dry turkey
  - **4.** Mark water level. Dump water, dry the pot, and fill with oil to the marked level.

It won't hurt to keep a fire extinguisher on hand just in case a bad situation develops. Enjoy your time turkey frying but please do it safely.

The Georgia Tech Fire Safety Office (404-894-2990) would like to extend their thanks to Underwriters Laboratories <u>www.ul.com</u> and The National Fire Protection Association <u>www.nfpa.org</u> and the U.S. Consumer Products Safety Commission <u>www.cpsc.gov</u> for this information.

### **Radiation Safety Joins EHS**

EHS Assistant Vice President (AVP) Mark Demyanek is pleased to announce that as of July 1, 2008, the Office of Radiation Safety (ORS) officially became a part of EHS. This is a move that will increase overall safety, efficiency and response capabilities to incidents on campus.

This transfer will also create increased opportunities for cross-training of both groups and will technical expertise with a full spectrum of EHS personnel.

The ORS will report administratively through the EHS AVP and will also continue

to provide periodic activity reports to the Provosts' Office. The Broad Scope License will continue to be the responsibility of the ORS and all other current responsibilities will remain the same. The Institute Radiation Safety Committee (RSC) will continue to operate as normal with no membership changes-since the AVP, EHS is already a member.

The AVP and all EHS staff are eager to expand our interactions with our fellow safety professionals in the ORS, and are excited to welcome Radiation Safety as a part of the EHS department.

### A sampling of recent campus incidents: Description: Needlestick

A researcher was learning a new protocol dealing with seeding scaffolding with baboon cells. During the last run, the needle slipped during manipulation and pierced the researcher's glove and skin. The researcher and the person teaching him the procedure called GT police. EHS was then contacted.

### **Resolution:**

The baboon cells were from vein materials that have very low risk of infection. The researcher did report to Emory University for a check-up and was also seen by a Worker's Compensation physician. The protocol is being evaluated to determine procedures that can be change to decrease the likely hood of similar incidents. EHS will also be reviewing its sharps handling procedures as well as its primate cell line usage policy to develop increased awareness and oversight on campus for those using needles and primate cells, tissues and fluids.

### **Lessons Learned:**

Always use extra caution when working with needles or primate cells. If this had been another type of primate and/or different biological materials, the researcher could have been at risk of developing a life threatening illness.

### **Description: Transformer Oil Spill**

A golf cart driven by a Georgia Tech employee struck a transformer on the sidewalk on Armistead between Spring and West Peachtree (Tech Square). No injuries occurred, but the transformer line ruptured releasing approximately 20 gallons of oil onto the sidewalk and street.

### **Resolution:**

Georgia Tech Police and EHS responded and placed oil-dry on the spilled material. The Atlanta Fire Department also responded but departed when they determined that the situation was under control. Georgia Power was contacted to deenergize and replace the transformer, and an outside contractor was called in to perform the final clean-up. An outstanding response by all contributed to minimizing the impact of the accident. **Lessons Learned:** 

All persons driving a Georgia tech vehicle both automobiles and golf carts should have Defensive Driver's education that is offered by EHS via OOD. Also, transformers should not be located in the middle of side-walks since it impedes normal pathways.

# Description: Lack of hand washing facilities, eyewashes, safety showers, and adequate ventilation in offices spaces converted to wet bench labs

The Atlanta Fire Department was summoned to what was believed to be a natural gas leak in the Bunger Henry (BH) Building. The odor problem turned out to be a fermentation reaction that was set up in a room that was not originally intended to be a lab. Air from the room was not exhausted directly out of the building, but was recirculated back into the hall (and the rest of the building). A similar problem was also recently discovered in EST.

### **Resolution:**

The BH lab has since been equipped with the necessary hand washing facilities and an eyewash. The gaseous reaction products are now being collected through a water trap. In EST, a shower/eyewash is being installed and waterless hand washing protocols are being implemented. This lab is expected to be converted to dry lab applications only when the current research is completed.

### **Lessons Learned:**

Call EHS and work with the Facilities design team before converting any space from one type of use to another, particularly if attempting to change offices to labs. Any necessary retrofitting is much easier to accomplish before the move in.

### **EHS Safety Training Calendar**

#### **General Biosafety Training**

This class covers the new Georgia Tech Biosafety Manual. Students will learn the rules, regulations, and policies governing biological research here at Georgia Tech. This course is required of all researchers working in biological laboratories. November 6 9:00—10:30 am November 20 1:30-3:00 pm

### **Bloodborne Pathogens Training**

This training covers the nature, appropriate safety measures, and response to bloodborne pathogens. All This course provides drivers with researchers at Georgia Tech exposed to any type of human materials should attend this training. November 6 10:30—11:30 am November 20 3:00-4:00 pm

### **X-Ray Training**

This training is designs to educate X-Ray device users about safety and dents. You must have a valid state proper usage of an X-Ray device. November 11 1:00—3:00 pm December 12 9:00-11:00 am Nov

### **Radioactive Materials Training**

This training prepares radiological materials users to safely handle and store radioactive materials. The training includes a 1 hour hands (HO) on portion.

November 12 1:00-4:00 pm November 13 (HO) 1:00-2:00 pm 9:00—12:00 am December 3 December 4 (HO) 9:00-10:00 am Right to Know Basic and Chemi-

### **Fire Safety Training**

This fast-paced program will help you make better choices in emergency situations...at work and at home. You'll also learn some basic tips to reduce the likelihood of a fire in your work area or home.

October 23	1:00—4:00 pm
November 13	1:00—4:00 pm
December 4	1:00—4:00 pm

### First Aid/CPR

This course covers the latest CPR guidelines. CPR topics include how to recognize and care for breathing emergencies in adults, children, and infants. First Aid topics include treatment of life-threatening bleeding, sudden illness, and injuries. Certification will be obtained by attending the class and passing the final exam. 8:30-3:30 pm November 4

### **Defensive Driving Training**

knowledge and safe driving techniques to prevent accidents and violations. This course focuses on accident prevention through hazard recognition and application of accident-avoidance techniques. The course also addresses common driving violations that result in accilicense to attend this class.

October 28	8:30—4:00 pm
November 18	8:30—4:00 pm
December 2	8:30—4:00 pm
December 9	8:30—4:00 pm

#### **Radiation Awareness Training**

This training provides general knowledge to individuals working around or in labs with radiologicals. The training can be found at: http:// www.ors.gatech.edu/awareness.htm

## cal Specific Training

These courses cover the Georgia Public Employees Hazardous Chemical Protection and Right to Know Law. All researchers working chemical/transport\_test.doc with chemicals must take both course each year. Both can be found lisa.brindel@ehs.gatech.edu or online at the Board of Regents site: http://www.usg.edu/ehs/training/ or an training session can be requested with Debbie Wolfe-Lopez at 404-385-2964.

### **Online Bloodborne Pathogens** Training

Refresher bloodborne pathogens training can be found at the University System of Georgia website http://www.usg.edu/ehs/training/ pathogens/

This training is only to be used for refresher courses and can not be substituted for in-person first-time EHS training. A copy of the certificate from the USG training must be sent via campus mail code 0465 to the Assistant Biosafety Officer.

### **Online Chematix Training**

This online tutorial provides instructions on how to use Georgia Tech's chemical management system to order, track, and dispose of chemicals. This training can be accessed via the Office of Organizational Developmental website.

### New Chemical/Biological Shipping Training

All shipments of chemicals and biological materials must be shipped via EHS. But that does not preclude the people packaging the shipment for transport to EHS be without basic shipping training. EHS is now offering two part shipping training that covers basic hazard classification and information, as well as a hands-on portion to cover function specific training. The PowerPoint section can be found at http://

www.ehs.gatech.edu/chemical/ shipping.ppt with the required test at http://www.ehs.gatech.edu/ Contact either Lisa Brindel at Rvan Lisk at

ryan.lisk@ehs.gatech.edu to schedule a hands-on session to complete training.