

The SAFETY BEAKON



Volume 3, Issue 1

February 2006

Department of
Occupational
Health and
Safety

Dreams Really Do Come True!

Have you dreamed about one-stop web shopping for all your laboratory safety data needs? Okay...maybe not, but soon it will be a reality at UD. OHS recently received approval to purchase a suite of programs called EHS Assistant from On-Site Systems, Inc. Funding was obtained

through Facilities and the Research Office for this lab safety program improvement. The server will be housed and maintained by Information Technologies. These web-based products have the capability to improve our lab safety programs in radiological, biological, chemical, and fire safety

through centralizing and standardizing information, thus making it easier for laboratory PIs to monitor compliance.

The delivery

of all the programs will occur over a four month period and the first program to be implemented will be the radiation safety module. Once we learn how to smoothly transfer data and roll it out to all users we will implement the chemical and biological modules. Each module will provide users with the opportunity to monitor compliance with their personnel training requirements and lab inspections, as well as maintain their chemical, biological and/or radioactive inventories. Users will be able to query data, produce reports, and export data to many different formats. There

are many other beneficial features that we will share with you in the coming months.

If you currently use the Lab Management Program or have inventories in another database, we will work to transfer your data to EHS Assistant when the chemical module is brought on line. In addition, OHS will hold training sessions for users to help them learn the software.

Many thanks to Bob Stozek and Carolyn Thoroughgood for making this dream a reality! Making this dream a reality!



Developments at DOHS

DOHS would like to introduce and welcome Jennifer Pyle. Jennifer started with our department on Monday, January 9th and holds the position of Occupational Health and Safety Specialist. She will primarily be responsible for managing the asbestos and lead-paint programs. Jennifer was most recently employed as a project manager by Environmental Test-

ing, Inc., an environmental consulting and testing laboratory, located in Middletown, Delaware. She brings over 25 years of experience with her and possesses a State of Delaware Professional Engineer's license in the discipline of Mechanical Engineering. Jennifer is also an exercise enthusiast. She regularly bicycles, runs and partici-

pates in exercise classes held at the Carpenter Sports Center.

Please help us in welcoming Jennifer to the University and the OHS team!



Jennifer Pyle

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Home Heating Safety Tips

As the temperatures continue to drop and the energy costs rise, consumers are looking for alternative ways to heat their homes. While alternative heating methods may be cost efficient, they may also increase the chance of a fire in your home.

According to the National Fire Protection Agency (NFPA), 68% of the 45,000 home heating fires reported in 2002 involved alternative heating sources. Examples of these alternative methods include: space heaters, fireplaces, and coal or wood burning stoves. Each has its own inherent fire risk and requires



additional safety measures to safeguard the home.

Space heaters should only be used as a supplementary heating source and should always be kept at least three feet away from combustible material. Heaters should only be used according to the manufacturer's recommendations and never with an extension or damaged cord. Additional precautions that can be used include ensuring that the heater has an Underwriters Laboratories (UL) label indicating it has met stringent safety

standards. Fireplaces and coal or wood burning stoves should be inspected and serviced at least once per year. Make sure that all smoke detectors are working properly and are equipped with a new battery. As an added precaution, carbon monoxide (CO) detectors should be installed where applicable and maintained with a new battery as well.

The alternative heating sources may save money as long as they are used in a safe manner. For more information please go to <http://www.ul.com/media/newsrel/nr112305a.html>.

When it Rains it Pours!

The University of Delaware has recently entered into a contract with the City of Newark to better manage the stormwater on campus. As this program has been developing we have learned, as so many on campus already know, that the students at the University are a valuable resource to utilize and learn from. One such student who has demonstrated this is Elaine Grehl, a graduate research assistant working for UD Institute for Public Administration Water Resources Agency. She recently developed a rain garden on cam-

pus that was designed not only to be aesthetically pleasing, but environmentally functional as well. Her goal was to design a Rain Garden that would capture stormwater from surrounding impervious surfaces and facilitate infiltration into the groundwater. This is a relatively new, progressive "green" technique that is being used for stormwater management in an effort to reduce the quantity and increase the quality of runoff into our surrounding water ways. Not only does the garden aid in re-charging the ground water, but it also lures

birds and butterflies and increases the appeal of the campus. If you are interested in viewing the garden it is located in front of the Water Resources building (behind Penny Hall). What a great contribution to the UD campus and the health of the surrounding waters!



Completed Rain Garden

Chemical Hygiene Committee: Texas A&M Liquid Nitrogen Explosion

At approximately 3:00 am on 12/9/2006, a liquid nitrogen dewar over-pressurized and ruptured inside a Texas A & M Chemistry Department Instrumental Laboratory. The explosion cause extensive damage, including large holes in the roof and a wall and involved unknown amounts of hazardous reagent chemicals. The third floor labora-

tory will require extensive repairs and the entire floor will be closed for at least two months. The exact cause of the over-pressurization is unknown, but this incident highlights the hazards of liquid nitrogen and compressed gases. It is imperative that University Policies, the University Chemical Hygiene Plan and all recommended safety practices be closely followed

when working with this class of hazardous materials. Look for an updated policy on the Safe Use of Compressed Gases to be issued soon and contact your Departmental Chemical Hygiene Office or DOHS with any questions or concerns regarding the safe use of compressed gases and cryogenic liquids in your laboratory.

So How Do I Move My Samples Across Campus?

Because the Department of Transportation (DOT) regulates the transportation of hazardous materials DOHS often receive questions regarding how to safely and legally transport materials from building to building or campus to campus.

The first step is to determine whether your samples are considered hazardous materials per DOT guidelines. This can be done by contacting the University Chemical Hygiene or Biosafety Officers. Even if the ma-

terial is considered a hazardous material, in most cases it can be transported within the state legally as long as certain procedures are followed after consulting with DOHS.

Hazardous materials must be packaged in a secondary container with absorbent to prevent breakage and leaks. A sheet listing the materials being transported and emergency contact numbers should be attached to the container. Hazardous materials must be transported in a University vehicle by a University

employee. Non-hazardous materials should be packaged as described above, and should include the contents list as well. It is also recommended that non-hazardous materials be transported in a University vehicle.

For specific guidance on the transport of biological materials, visit <http://www.udel.edu/OHS/biotransportprocedures.html> and for chemical samples, visit <http://www.udel.edu/OHS/tranhazmat.html> or call DOHS.

Celebrate National Heart Month



Did you know that cardiovascular disease kills more women than the next six causes of death combined? And did you also know that heart disease and strokes kill one in every 3.7 men? February is National Heart Month and a great time to initiate a life style change that will improve your heart health. Start a healthy habit, such as exercising or eating healthy foods. This month the American Heart Association is featuring its "Go Red for Women" campaign, in an effort to raise awareness about heart disease and empower women to reduce their risk through educational programs and

special activities. For more information on heart disease and the Go Red for Women campaign, visit <http://www.americanheart.org/>.

Training for a life saving measure, cardiopulmonary resuscitation or CPR, is offered by the Department of Occupational Health and Safety every month. It includes the use of semi-automatic external defibrillators (AED's), which are used to shock someone's heart back to a normal rhythm when they've had a cardiac arrest. The University has AED's in place in 18 buildings



Semi-automatic external defibrillator (AED)

throughout all four campuses as well as in all University police cars and the Emergency Care Unit ambulance. For information on taking a CPR class, visit <http://www.udel.edu/OHS/CPR.html> or contact DOHS.

Look Who's Safe—Charles Garbini

Charlie Garbini joined Materials Science & Engineering in June 2005 and has taken their safety program to a new level! Coming from a research and development setting in DuPont, Charlie has a great grasp of the safety challenges presented by research. He took an interest in making sure that laboratory inspections were completed in all their facilities and soon learned that educational sessions were needed. He developed and presented sessions



for all faculty and stressed the importance of the safety program. Charlie also has expertise in compressed gas safety and arranged for a special seminar to be presented on compression fittings for the graduate students which included a quiz! Other actions Charlie has taken to improve the program

are: assured all personnel receive required safety education, stocked gloves and safety glasses for students, established a safe gas cylinder delivery point, assured MSDS binders and chemical inventories are complete for each lab, along with many other improvements. Most importantly Charlie encourages his colleagues to improve through positive reinforcement. Thanks to Charlie, Materials Science & Engineering is a safer place!

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Training Schedule for upcoming DOHS Courses

For additional information and upcoming courses please see our website!

* Note: All trainings take place in GSB 130 unless otherwise specified.

**Check out our
web page!
www.udel.edu/ohs**



Lessons Learned: When Should I Use a Fume Hood?

Recently, a reflux reaction was being performed on an open bench top in a laboratory. This reaction mixture (1-Hexane and Sulfuric Acid) was expelled through the top of the apparatus. An unknown amount of material splashed into the mouth of a student on the opposite side of the laboratory bench while another student standing next to the apparatus received a splash to the forehead.

This reaction should have been conducted inside a properly operating fume hood with the sash partially closed to provide additional protection to the face and body of the students conducting the procedure. Fume hoods are designed to contain hazardous air contaminants and exhaust them to the outside, away from laboratory and building occu-

February 1, 2006 Rm. 130 GSB	Safety Program Orientation	11:00a.m.-12:00p.m.	Robin Elliott
February 1, 2006 Rm. 130 GSB	Safety Program Orientation	3:00-4:00p.m.	Robin Elliott
February 2, 2006 Rm. 130 GSB	Safety Program Orientation	9:00-10:00a.m.	Robin Elliott
February 7, 2006 Rm. 130 GSB	Laser Safety Training	3:00-4:15p.m.	William Fendt
February 8, 2006 Rm. 130 GSB	Biosafety Training	2:00-3:00p.m.	Krista Murray
February 9, 2006 Rm. 130 GSB	Initial Radioactive Material Safety Training (Part 2)	9:00-10:30a.m.	William Fendt
February 9, 2006 Rm. 130 GSB	RTK/Chem Hygiene Training for Lab Workers	1:30-2:30p.m.	Kevin Eichinger
February 9, 2006 Rm. 130 GSB	Safety Program Orientation	3:00-4:00p.m.	Robin Elliott
February 14, 2006 Rm. 130 GSB	Refresher Radioactive Material Safety Training	9:00-10:00a.m.	William Fendt
February 14, 2006 Rm. 130 GSB	Confined Space Training (Part 1)	10:00-11:00a.m.	Joseph Miller
February 14, 2006 Rm. 130 GSB	CPR - Heartsaver Cost of This Class is \$30.00	6:00-9:00p.m.	Kevin Eichinger
February 15, 2006 Rm. 130 GSB	Environmental Programs at the University of Delaware	9:00-10:00a.m.	Dave Levandoski
February 15, 2006 Rm. 130 GSB	Compressed Gas Safety Training	1:30-2:30p.m.	Kevin Eichinger

pants. They also provide a physical barrier in case of splashes, sprays or explosions. In general, a fume hood should always be used when the following conditions exist:

- Procedures involving boiling liquids or the possibility of a splash, spray or mist hazard.
- Procedures that are under pressure or under a vacuum.
- When volatile, flammable, corrosive or toxic chemicals are used.

Remember, you still must wear appropriate laboratory clothing and

personal protective equipment including lab coats, safety glasses and the appropriate gloves when working in a fume hood. Researchers must also wear splash goggles and face shields in instances where the fume hood sash does not provide adequate protection for splashes, sprays, mists or other hazards. Blast shields may be required if there is a chance of detonation or explosion. DOHS offers laboratory ventilation safety classes on a monthly basis. Check out our webpage at <http://www.udel.edu/ohs>.