



Safety Talk

Department of Environmental Safety NEWS

Volume 3, Issue 1

UNIVERSITY OF MARYLAND

Fall, 2007

Director's Spotlight

Dept of Homeland Security Issues Chemical Facility Anti-Terrorism Standards

Maureen Kotlas

On April 9, 2007, the U.S. Department of Homeland Security (DHS) issued the Chemical Facility Anti-Terrorism Standards (CFATS). Congress authorized this interim final rule directing DHS to identify, assess, and ensure effective security at high risk chemical facilities.

Facilities that possess one or more of the listed chemicals at specified Screening Threshold Quantities (STQ's) must complete a Chemical Security Assessment Tool Top-Screen. The Top-Screen asks a series of questions regarding the chemical(s) manufactured, processed, used, distributed, or stored by the facility, in order to

determine if the facility meets DHS's definition of a "high risk" facility. Facilities designated high risk will be placed in one of four risk tiers and may need to conduct a Security Vulnerability Assessment and a Site Security Plan.

On June 20, 2007, representatives from several higher education associations met with DHS to discuss the impact of this regulation to universities and colleges. The Director, Department of Environmental Safety (DES) attended that meeting. DHS made it clear that this rule will apply to institutions that have one or more of the approximately 350 listed chemicals at or above the Screening Thresholds. DHS believes that some universities will ultimately be ranked in Tier 4 and will be required to develop Site Security Plans.



Due to thousands of comments received by DHS and concerns raised by colleges and universities, DHS announced formation of a

University Working Group (UWG) that will convene in August 2007 to work with DHS to determine appropriate strategies for higher education. The University of Maryland expects to be represented on the UWG.

DES is developing a strategy to collect the information needed to complete the Top Screen form while we wait for release of the final chemical list and direction from the UWG. This will be a significant effort requiring the cooperation and participation of the research community. More information will be sent to departments as soon as details are known.

For more information, please refer to the DES website at www.des.umd.edu or the DHS website at www.dhs.gov/chemicalsecurity.

Special points of interest:

- Are you due/overdue for job-specific safety training? Click on Your Training Record at <http://www.des.umd.edu>
- The DES Annual Report for 2005-2006 is now available. http://www.des.umd.edu/general/AnnualReport05_06.pdf
- Safe Handling and Use of Cryogenic Liquids training is now available. Go to: Online Training at <http://www.des.umd.edu>
- Teen Workers More Likely To Be Injured On The Job article available at <http://www.asse.org/newsroom/release.php?pressRelease=893>

Online Resources www.des.umd.edu

- Information and Programs by DES divisions.
- Environmental, Health and Safety Training classes schedule.
- Information for laboratory workers, principal investigators, supervisors, facilities and trades staff, and compliance officers.
- Environmental Safety's forms, permits and documents.

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Creating a Sustainable Campus

Environmental Affairs

Sustainability is a hot topic for government, industry, and especially for higher education institutions. Many college and university leaders have recognized the tremendous impact their institutions have on the environment and their role in developing leaders who can handle the challenges presented by a growing human population on a planet with finite resources. The University of Maryland (UMD) is rapidly becoming a role model in the campus sustainability movement and has received national recognition for its dedication to smart and sustainable land use and growth. Of course, UMD is not an institution to rest on its laurels. Thanks in large part to recent commitments made by President Mote, major steps are being taken to make UMD one of the most sustainable campuses in the nation.

This May, President Mote signed the American College and University Presidents Climate Commitment making UMD one of roughly 300 institutions that have pledged to reduce greenhouse gas emissions. New policies and technologies must be employed to reach the Climate Commitment's ambitious goal of climate neutrality (zero net carbon emissions) and new organizations are forming on campus to help reach that target. Starting in the fall, a Climate Action Plan Workgroup will begin designing strategies for minimizing greenhouse gas emissions. At the same time, a Greenhouse Gas Inventory Task Force will take on the challenge of measuring all of the global warming pollutants emitted from campus operations. One of the Univer-

sity's in-house research centers, the Center for Integrative Environmental Research (CIER), has agreed to conduct the greenhouse gas inventory.

In addition to seriously combating global warming emissions, President Mote and Vice President for Administrative Affairs, Doug Duncan, also approved the creation of a Sustainability Office within DES. Sustainability Office staff, the first of whom will be hired in the fall, will help coordinate greenhouse gas reduction strategies while addressing broader issues of sustainability affecting the campus. Sustainability staff will work collaboratively with other campus personnel to reduce resource dependence and promote an engaging educational environment for students and the general community.

To learn more about previous and current campus sustainability initiatives, visit www.sustainability.umd.edu. From this website, you can also view the 2007 Campus Sustainability Report, find online resources, and learn what you can do to reduce your environmental impact. Finally, if you are a faculty member, staff member, or student who is working on or recently completed a project related to sustainability, or if you have an idea that would make the campus more sustainable, we would like to know about it. Please use the links on the homepage (www.sustainability.umd.edu) to submit your project ideas or seek student volunteers for your sustainability project.



30,492 square feet of impermeable pavement was transformed into green lawns and open space outside Van Munching Hall. According to the Master Plan, within 20 years, all parking in the southwest portion of campus will be in garages and most surface lots will be replaced with networks of green spaces.

Laboratories Can Be Dangerous Places to Work - If You Ignore the Rules!

Robert Galemba

Occupational Safety and Health

When one thinks about a laboratory, there may be visions of chemicals boiling in flasks. At UM, there are not only these types of labs, but also engineering, biological, aerospace, mechanical, geological, physical, nuclear, and agricultural. Depending on the type of research, there may be the following hazards:

- Flammables and Combustibles
- Toxics
- Corrosives
- Reactives
- Low and High Voltage Electricity
- Burns
- Biohazards
- Environmental
- Glassware
- Pressure/Vacuum
- Slips, Trips, Falls
- Ionizing Radiation
- Non-ionizing radiation, i.e., lasers,
- Microwaves
- Magnetic Fields
- Noise
- Cryogenics
- Writing, reviewing, and incorporating changes in Standard Operating Procedures (SOP's) before an experiment begins
- Assessing the need and using appropriate proper personal protective equipment such as eye and hand protection
- Substituting safer chemicals
- Using engineering controls such as laboratory hoods or other exhaust ventilation
- Preparing for worst-case scenarios and developing an emergency plan
- Insuring all personnel working in the lab have received training appropriate to their tasks
- Ensuring emergency eyewashes and showers are functional and accessible
- Having a chemical spill kit readily available
- Seeking medical guidance when you suspect a chemical exposure
- Ensuring your laboratory Caution Sign is up-to-date
- Contacting DES to report safety concerns or for assistance

It is important to recognize all hazards. There may be other hazards that are not on the list and other previously unknown hazards created during state-of-the-art research.

Most hazards can be either eliminated or minimized by developing and implementing safe practices. Methods include:

- Developing a Chemical Hygiene Plan in laboratories that use chemicals and reviewing Material Safety Data Sheets (MSDS)





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TALK

DES News

Department of Environmental Safety

Fall 2007

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Staff/Faculty Access to Exposure Monitoring and Medical Records

The University of Maryland is required to provide employees access to (1) workplace exposure monitoring records relevant to their work area, and (2) their own personal medical records. Exposure monitoring records are maintained by the Department of Environmental Safety (x53960). Examples of exposure records include noise, toxic air contaminant measurements, and radiation monitoring data (for those who work with radioactive materials). Employee medical records, (e.g., medical surveillance examinations, hearing conservation audiograms, etc.) are maintained by the Occupational Health unit at the University Health Center (x48199). Workers' compensation medical records are maintained by the Medical Records unit at the Health Center (x48184).

Well, that depends on who you are talking to ...

Try to match the following environmental initialisms with the appropriate meaning. See if you can spot the common thread.

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| <p>CAA:</p> <ul style="list-style-type: none"> a. Clean Air Act b. Compliance Assurance Agreement c. All of the above <p>CAFO:</p> <ul style="list-style-type: none"> a. Concentrated Animal Feeding Operation b. Consent Agreement/Final Order c. All of the above <p>CAP:</p> <ul style="list-style-type: none"> a. Corrective Action Plan b. Cost Allocation Procedure c. Criteria Air Pollutant d. All of the above <p>EA:</p> <ul style="list-style-type: none"> a. Endangerment Assessment b. Enforcement Agreement c. Environmental Action d. Environmental Assessment e. Environmental Audit f. All of the above <p>FR:</p> <ul style="list-style-type: none"> a. Federal Register b. Final Rulemaking c. All of the above | <p>ICS:</p> <ul style="list-style-type: none"> a. Incident Command System b. Institute for Chemical Studies c. Intermittent Control Strategies d. Intermittent Control System e. All of the above <p>PSI:</p> <ul style="list-style-type: none"> a. Pollutant Standards Index b. Pounds per Square Inch c. Pressure per Square Inch d. All of the above <p>RAC:</p> <ul style="list-style-type: none"> a. Radiation Advisory Committee b. Raw Agricultural Commodity c. Regional Asbestos Coordinator d. Response Action Coordinator e. All of the above <p>SNAP:</p> <ul style="list-style-type: none"> a. Significant New Alternatives Project b. Significant Noncompliance Action Program c. All of the above |
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ANSWERS: The answer in every case is "All of the above." Many environmental initialisms have different meanings under the numerous regulations and agencies that exist. The meaning often depends on who you are talking to.