



notes

ENVIRONMENTAL HEALTH and SAFETY

Recycling and Propane Cylinders

Sustainability is a concept that is becoming increasingly important in our campus community, as exemplified by the establishment this year of a Campus Sustainability Office. MU had already made significant progress to decrease our environmental impact as much as possible through a robust hazardous materials management program, energy conservation, and recycling efforts. EHS has long been at the forefront of these efforts, even before the term "sustainability" was popularized. Our chemical recycling program makes usable unwanted chemicals available for reuse by campus researchers and diverts them from disposal streams. In recent years, that program was expanded to include laboratory equipment that was suitable for reuse. In FY09, MU EHS facilitated the recycling of 2443 containers of chemicals (4780 pounds) valued at \$175,000, along with 586 pieces of equipment (939 pounds) valued at \$20,000.

EHS continues to build upon these successes by constantly evaluating materials that could qualify for recycling. Recently a new device called the "Green Key" was developed by Coleman which has the potential of making millions of single-use propane cylinders suitable for steel recycling in lieu of landfilling. This "Green Key" provides consumers a tool to durably and

conspicuously mark the propane cylinder as empty, while physically ensuring the cylinder valve remains open. "Green Keys" are already included with

the purchase of single-use propane cylinders from several major manufacturers, and are available at a nominal cost to manage the cylinders purchased before the program began. The EHS Chemical Recycling Program is also stocking "Green Keys" and they are available free upon request. Instructions for these "Green Keys" can be viewed at:

http://www.coleman.com/coleman/recycle/cylinder_dis.asp

EHS has recently established a program at the Resource Recovery Center to recycle these empty propane cylinders, and is currently establishing collection containers at those campus locations that generate large quantities of empty propane cylinders. If you or your department is a large generator of these devices or you wish additional information, please contact EHS Hazardous Material Services at 882-3736 or [hazmat@missouri.edu](mailto: hazmat@missouri.edu).

In This Issue

Recycling and Propane Cylinders	1
Safety is Essential	2
Annual Biosafety Protocol Survey	2
Changes to Radioactive Use Areas	3
Safety Showers	3
Fire Factor	4
H1N1 Update	4

Chris Pearman

Environmental Specialist

EHS**Director's Desk****Safety is an Essential Part of All Our Jobs**

I have been really busy to the point of feeling swamped for quite some time. It seems that just about everyone I work with feels the same way. Economic conditions have made things worse, but it seems like we have been trying to do more with less for a long, long time. I think the ready availability of the internet and cell phones encourage us to lengthen our work days rather than simplify our lives.

One of the consequences of feeling overworked is that we sometimes do not do a thorough job of planning our activities. Then when we implement these plans, we may forget some of the pitfalls we are trying to avoid. In some cases, forgotten issues simply create an inconvenience; but when it comes to safety, forgotten issues or cutting corners can have severe consequences. EHS wants each of you to go home as healthy, or healthier, than when you arrived at work this morning. For this to happen, we need to recognize that safety is not a luxury or something desirable to do—it is an integral part of all our jobs. First and foremost we must hold ourselves accountable for safety. In addition we need to hold our peers and subordinates accountable for safety.

We recently worked with an MU professor on a safety review for a laboratory demonstration. When we started asking questions about the demonstration, the feedback we got was that the demonstration was canceled because the safety review was too much effort. Although I am disappointed that the demonstration was canceled, I now think that this was a good thing. If there was not enough time to properly review safety issues, there was an increased likelihood of something going

wrong.

Safety reviews can be tedious at times. EHS tries very hard to balance timeliness, cost and administrative burden against the effort expended to conduct a thorough safety review. Judging by the relative lack of complaints I receive, we have done a good job of meeting campus expectations. In the end, though, safety depends on you much more than EHS.

Please take time to examine your priorities and try to make changes to give yourself a reasonable workload. And by all means, remember to be safe.

Peter Ashbrook

Annual Biosafety Research Protocol Survey

It is time again to get on-line for user-friendly annual biosafety renewals. Each researcher will receive an email titled "Annual rDNA & Biosafety Protocol Survey" with instructions on the process. The annual biosafety survey will be due by December 11, 2009.

EHS conducts this annual survey to maintain an accurate list of active biosafety research protocols involving recombinant DNA (rDNA) and those approved at Biosafety Level 2 (BSL2) or higher. This annual survey program allows researchers the opportunity to reflect any changes or updates in their important life sciences research work at MU. Each researcher has the responsibility to complete this survey on an annual basis to maintain current IBC approval.

As a reminder, any spill or accident involving rDNA, BSL2 or higher research, which leads to personal injury or illness or to a breach in containment, must be reported to EHS immediately. (EHS will determine NIH or CDC reporting requirements based on the incident and circumstances.) The annual biosafety survey requires each researcher to verify their

laboratory's spill or accident status for the past year.

Please contact your EHS Biosafety Team (882-7018) or refer to the EHS website <http://ehs.missouri.edu/bio/index.html> for any questions or additional information.

Mary Reichel
Environmental Health Technician

Changes to Radioactive Material Use Areas

Moving or inactivating an area approved for use of radioactive materials? When moving out, inactivating, renovating, performing deconstruction or construction (small and large), terminating your authorization, or changing the defined use of your area from a lab to non-lab use area, you are responsible for notifying EHS before any actions are taken. EHS needs to ensure proper transfer or disposal of all radioactive materials, completion of radiological confirmatory surveys, and any necessary decontamination of remaining equipment or use locations (cabinets, counter tops, etc) in your lab impacted by any of the activities above.

What are you to do with your radioactive materials when performing any activities listed above? One option is to move it to another of your authorized areas that is not being affected by the process. Another option is to transfer your radioactive materials to another MU AU authorization in accordance with the Radiation Safety Manual and assistance from EHS. A third option is to arrange with your assigned Health Physicist for temporary storage at another location. Lastly, there is always the option of completing a Pickup Request Form for disposal.

For more information see page 54 of the Radiation Safety Manual <http://ehs.missouri.edu/rad/manuals/radsafety.pdf>, or contact your assigned Health Physicist.

Jack Crawford
Assistant Director, EHS

Safety Showers

In the Spring edition <http://ehs.missouri.edu/about/pdf/spring09.pdf> of this newsletter I wrote about the death of a 23 year old lab assistant at UCLA. The student, Sheri Sangji, was badly burned while using pyrophoric materials. The incident occurred on December 29, 2008, and she died 18 days later.

As you may recall, there was a working safety shower close to where Ms. Sangji was working, but she never used it. In fact, reports indicate she ran in the opposite direction of the shower. No one knows for sure how they would react in a similar situation, but we also know that those who have trained and prepared are more likely to make life-saving decisions when an event actually occurs.

Please take a minute and make sure you know where the nearest safety shower is located. Think about whether you could find the safety shower if your vision was limited or you were in great pain. Talk to your co-workers and ask them to do the same thing. If you are ever splashed with chemicals or on fire, those co-workers are likely to be the people who save you.

Another thing that takes everyone's cooperation is an ongoing commitment to keeping these areas free of obstructions. Never store items near an eye wash or safety shower. A person who has been splashed may find it difficult to muster the will to even get to the safety device. Can you imagine struggling to make your way to the safety shower only to find you couldn't use it?

It only takes a couple of minutes to familiarize yourself with the location and use of a safety shower. Please contact EHS if you have any questions.

Dennis Elmore
Manager, Industrial Hygiene/Occupational Safety



ENVIRONMENTAL HEALTH AND SAFETY

8 Research Park Development Building
University of Missouri-Columbia
Columbia, MO 65211

(573) 882-7018
<http://ehs.missouri.edu>



Fire Factor

EHS wishes to thank the Columbia Fire Department, Residential Life, Student Services and others for making this year's Fire Factor a big success. If you missed the burning of a mock student room — or would like to see it again—you can see it on this YouTube video:

<http://www.youtube.com/watch?v=tMpfSc7Wd0Y>

EHS appreciates campus support of environmental and safety issues. If you have any special needs regarding the format of this publication, or have any comments regarding newsletters, training programs or services, please direct your communications to Rebecca Bergfield, Editor at the above address.

H1N1 Flu update

Campus administrators have been monitoring news pertaining to the novel H1N1 influenza and making preparations to minimize its impact on campus activities. Public health authorities are concerned because cases of the novel H1N1 influenza continued throughout the summer and have been seen this fall throughout the country. These observations are unusual, making the likelihood of a significant flu outbreak this fall or winter more likely than usual. In addition, there have been understandable concerns about when the novel H1N1 flu vaccine will be available.

The campus is maintaining up-to-date guidance for the campus community at MU Alert: <http://mualert.missouri.edu>.

In addition, EHS maintains a pandemic flu web page <http://ehs.missouri.edu/other/er/pandemic.html> which contains general information about the flu and links to various government web sites for more information.

EHS encourages everyone to get vaccinated for both the seasonal flu and the novel H1N1 flu, and to follow the recommendations of public health authorities.

Peter Ashbrook
Director