



Notes

ENVIRONMENTAL HEALTH and SAFETY

The Last of the First

As with any department, over the years employees come and go. EHS started out with 14 employees when it was founded in 1980. Only one person from the original EHS staff is still with EHS. That would be Russell Hanson. Russell started as an Environmental Chemist managing chemical wastes. Not surprisingly, Russell has had a major impact on the development of the Hazardous Materials Management program at MU.

But service to MU was not enough for him. Russell has taken MU's service mission seriously and developed a Hazardous Waste training program for persons in the hazardous waste management business. He calls this program the Hazardous Waste Management Institute and it currently is a week long training program offered through the College of Engineering. This August, Russell will be coordinating the 24th Annual Hazardous Waste Management Summer Institute. These summer institutes were so successful, he also started a Winter Institute, and the 8th Annual Winter Institute was held this past January. Over 1,000 persons throughout the Midwest have been trained through these institutes and attendance continues to be excellent.

On a personal note, Russell is also active in the Free Masons, rising to his current title of Grand Standard Bearer for the Grand

Commandery of Knights Templar for the State of Missouri.

We appreciate all Russell has done for EHS and the community, as well as the rest of our terrific staff, now 38 members strong.

They are the spirit of this department that makes it something to be proud of.

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About this Issue

This issue of the EHS Safety Notes is in celebration of our 25th anniversary as a department. We take pride in our accomplishments so far and look forward to serving MU for the next 25 years and beyond. Please help us celebrate by reading about the changes that have occurred since we first started out and by participating in one of the planned events we have scheduled. A schedule can be found on the last page of this newsletter.



Director's Desk

EHS 25th Anniversary

For a university that was founded in 1839 the fact that one of its departments is celebrating its 25th anniversary may not seem like anything special. So why are we making a big deal out of this milestone? I have three answers to this question.

First, 1970 was an important year in the history of workplace safety and the environmental movement—both the act establishing OSHA and the first Earth Day occurred that year. It took about 10 years for MU to realize that these issues affected not only “industry”, but also MU itself. In this context, 25 years is a milestone. In 1970, people generally pointed the finger at “industry” and pushed a “command and control” agenda which consisted of a heavy dose of direction from the federal government on how to work safely and protect the environment. As programs have matured, most thoughtful persons recognize that these issues apply in virtually all workplaces and that the best solutions to safety and environmental challenges come from the regulated community. The current climate is characterized much more by cooperation on all levels than 25 years ago. It is EHS’ intent to be seen as a campus partner rather than another source of red tape.

Second, a safety culture and good environmental performance can only occur with the participation of all members of the MU community. EHS certainly has a major role in both broad issues; however, success is dependent upon participation by all. This anniversary gives us an opportunity to celebrate our accomplishments and promote additional progress. Our

anniversary also gives EHS an opportunity to recognize the many contributors to the successful safety and environmental activities present at MU. Elsewhere in this newsletter you will see reviews of some of our programs and plans for the future.

Last, we just wanted an excuse to have a party. Well, not exactly. We have a lot of good people and good programs here at MU, and these need to be recognized. Please come help us celebrate.

Peter Ashbrook

Safety Training at MU

One doesn’t have to go far at an institute of higher learning to find a classroom full of students. The Environmental Health and Safety training programs complement this aspect of MU by offering a wide variety of classes focused on safety within the university setting. The EHS training program has grown considerably over the years.

According to our records we offered a few sporadic classes in the early 1990’s but our training program didn’t move into full swing until 1993. Then we offered 23 classes to slightly over 300 students. The classes represented 13 different topics and mostly focused on student safety. During the last fiscal year EHS offered 316 classes, representing 47 different topics, to over 3,000 students. In addition to our classroom setting, we started offering our first on-line class in 2001. This class, a Hazardous Materials Management Refresher class, is currently not available as it is being updated. However, we are offering two on-line campus safety orientations, one for faculty and staff and one for students.

Our plans for the near future include an automated sign-in system so that students can sign up for classes on-line. We are also working

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Training (cont.)

on making training records available on-line so that you can keep track of the EHS classes you have taken. There are plans to offer more classes on-line for your convenience. A Chemical Management for Chemical Worker Refresher class as well as a Radiation Safety Refresher class are just two of the on-line classes we have in the works. Finally, in order to clarify what classes an individual needs to take at MU, we are developing an on-line training questionnaire. This will ask the user to answer a series of questions and will then indicate which classes are required for their position, as well as offering suggestion for further safety instruction.

What makes our training important is not just the safety training it represents for the workplace, but also the safety knowledge it offers for life. Back strains, accidents where someone needs first aid or CPR, and fires can happen just as easily at home as they can in the work place. Please check out our website for a complete list of the classes we are currently offering. Feel free to contact EHS if you don't see something you need or if you want to set up a special class for a group.

Rebecca Ann Bergfield

Training and Development Coordinator

Environmental Management

Hazardous waste management was perhaps the single biggest factor driving the establishment of EHS as a department. While there was a Health Physics Office, and certain safety and general industrial hygiene services were being provided to campus, management of chemical wastes was one of those issues that became an area of significant attention and expense in the 1970's and 1980's. In the 1970's, specially designed hazardous waste landfills seemed to be the responsible management method. We soon learned otherwise. In the 1980's, on-site incineration seemed to be desirable, but this also changed. Like many other large research institutions, EHS obtained a permit for MU as a

"treatment, storage and disposal" facility to allow it to store hazardous wastes for up to a year prior to shipment off campus for appropriate management. Recently, EHS has determined that the campus is better served without the permit and now must ship off all its hazardous wastes within three months of when they go into storage.

These major changes indicate how the nation's thinking has evolved on optimum management of hazardous wastes over the past 25 years. Anyone who has been on campus can attest to the many changes that have occurred in management of these materials. To respond to these needs, EHS established a Hazardous Materials Management program early on. Due to rapidly increasing disposal costs that went from thousands of dollars per year to hundreds of thousands of dollars per year, and stringent new regulatory oversight, the Hazardous Materials Management program grew to be the largest program within EHS.

Over the years, a lot has been asked of the Hazardous Materials Management program. It addressed issues such as management of infectious wastes, oversight of underground petroleum storage tanks, monitoring of laboratories for both regulatory compliance and safety issues, and compliance with regulations on shipment of hazardous materials. As environmental programs other than hazardous waste management gained increasing attention, EHS saw the need to develop a more formal environmental compliance capability and the Hazardous Materials Management program was the obvious place to put it. As a result, last year the Hazardous Materials Management section was "retired" and replaced by the Environmental Management section. The "new" section has two major components: Hazardous Materials Services and Environmental Compliance Services. Hopefully, this structure will last us another 25 years.

Todd Houts

Asst. Director EHS - Environmental Management

Radiation Safety

Radiation Safety is possibly the oldest of EHS programs and pre-dates the establishment of EHS. For many years, radiation safety was a joint responsibility of the Health Physics Office of the University System and the Health Physics Office of the Columbia campus. The System Health Physics Office was decentralized in the late 1980's and staff was enhanced at each of the University of Missouri campuses. At the Columbia campus, radiation safety for the Research Reactor is handled separately from radiation safety on the rest of campus and the Hospital. The current EHS program can be viewed as having two major components: research uses of radioactive materials and medical uses (both in humans and in animals).

Because of its longer history, the Radiation Safety program has frequently been looked at as a model for other EHS programs, particularly those for hazardous materials and biosafety. Though more mature than other EHS programs, there are still plenty of opportunities for improvement. Some of the changes that are in the process of being phased in include the following:

- * An updated version of the Radiation Safety Manual (the 3rd edition) is on the web and being distributed in hard copy form to all Authorized Users.
- * Web based forms for pickup of unwanted materials (Rad-PURF), radioactive material transfers, and radioactive material orders.
- * A new radioactive materials waste label.

We have also been putting some efforts into training opportunities. We will soon be providing an on-line option for Radiation Safety refresher training. We also have quite a few videos available to provide supplemental training on a variety of Radiation Safety, X-ray Safety and Laser Safety issues.

Jack Crawford

Asst. Director EHS - Radiation Safety

Food Safety

Do you ever stop to think how your food was prepared? This question is continually on our mind at EHS in an effort to provide a safe and wholesome eating experience at Mizzou. As with any other field, advancements and new technology allow us to continually upgrade our food safety program to ensure a safe community on campus.

The food facility inspection started out in Student Health Services and moved to EHS in 1990. It has grown from someone just checking out the kitchens on occasion to a formal inspection program for all campus and Greek house food service facilities, bacteriological testing where reusable utensils are used, and electronic data collection. Temporary food permits, for campus functions where food is served, have been required for a number of years; recently, the process was streamlined to allow for electronic submission of information and electronic dispersal of the permit to the requester. Coverage of concessions at sporting events has increased to prevent any food borne problems to our thousands of students and guests. Training programs have also been developed to stay current with the times and allow our food handlers and managers to perform in a safer manner. All persons who are in charge of a food facility at any time are now required to have advanced sanitation management training. A small microbiological lab has also been developed.

Along with this, EHS has developed closer relations with Campus Dining, Intercollegiate Athletics, and the Greek community. One of our goals is to be considered a part of the solution with the expertise we have developed over the years, and not feared as the 'agency'. This has allowed EHS to improve the credibility and comprehensiveness of our food safety program so that we may continue to provide an atmosphere where you don't have to be concerned with how your food was prepared.

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Food Safety (cont.)

We remain dedicated to ensuring students and the campus community have a safe dining experience.

Dick Fancher
Sanitarian

Fire Safety

From its inception, EHS provided a variety of fire safety services to campus. Response to fires is one of the few environmental health and safety areas for which the campus is not self sufficient, depending on the Columbia Fire Department. The campus fire safety program received a big boost in 2001, when MU and the City of Columbia Fire Department agreed to jointly fund a fire safety position. This arrangement has resulted in greatly improved communication between the two, and has made it easier to jointly address fire safety issues of mutual concern. Over four years later, the successful partnership is envied by universities and municipalities across the country.

Duties of the Assistant Fire Marshal include the routine fire safety inspections of campus buildings and Greek Houses; review of construction plans for new university buildings; provide fire safety training; assist with the campus open burn permit process; serve as a liaison between the Columbia Fire Department and the University; monitor fire drills and develop evacuation plans; and assist with the Knox key box program on and off campus.

Two new fire safety events have originated on the MU campus, through the joint position. The "FIRE FACTOR", an event which introduces participants to the many aspects of firefighting, is held on the Lowry Mall every September. In October we have the "FIRE ATTACK", a family oriented competition where participants show off their firefighting skills at Stankowski Field. Both are interactive events that bring fun into safety training.

Debbie Sorrell
Assistant Fire Marshal

Biosafety

We have all heard about increased campus activity in life sciences research, which raises issues such as biological safety laboratories, biohazards, infectious agents, worker safety with animals, blood borne pathogens, recombinant DNA, select agents, and biosecurity. To address these issues, which have recently increased by leaps and bounds, EHS has worked with the Institutional Biosafety Committee to develop more formal policies and guidance on biological safety. The primary focus of the program is protecting and informing each of us about biohazardous material, proper use practices, and necessary controls.

Though EHS had provided some biosafety services to campus for many years, it was not until 2000 that a full-time Biological Safety Professional position was established with the appointment of Roy Parsons. The MU Biosafety Manual was compiled and approved in 2003 providing the MU Campus with clear direction, guidelines, and framework for future program development. During this same time there was a transition of certain administrative functions from the Office of Research to EHS, to address recombinant DNA, and occupational health and safety for animal care workers. New federal bioterrorism regulations, created in the wake of the September 11, 2001 disaster, brought about a select agent program that focuses on security and containment of biohazardous materials that pose special risks to the public and the environment. It is interesting to note that the number of MU researchers registered in the MU Biosafety program has grown from approximately 75 in the year 2000, to over 200 today.

EHS is in close partnership with the Institutional Biosafety Committee, Animal Care and Use Committee, Animal Resources, Animal Care Quality Assurance and campus researchers to ensure that research conducted with animals and biological is conducted safely.

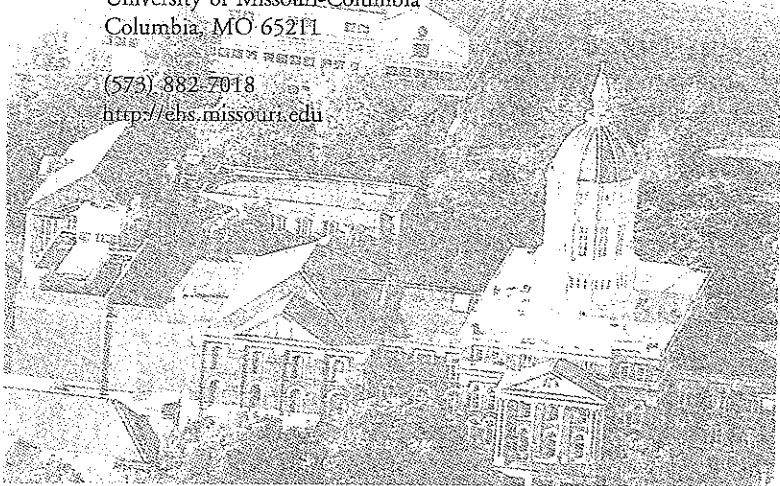
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Pool Safety

The Natatorium has been a fixture on campus for a number of years. It is now to be a thing of the past and has been replaced by a much larger pool complex at the Student Recreation Center. With its seven pools, including an Olympic size competition pool, diving pool, and hot tubs, it is now one of the top in the country. There are other pools associated with our campus; the majority being therapy pools. The campus now has a total of 11 pools and these pools are another area of responsibility for EHS.

All pools are now inspected once a month to be sure the disinfection levels are proper, the physical environment is safe, and that there are no bacteriological problems so that people don't become sick from contaminated water. A new pool guide will be coming out at the end of the summer as a further means to help the pool operators to provide a safe environment. EHS is committed to providing a safe and enjoyable swimming experience for our campus community.

Dick Fancher
Sanitarian

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.

EHS 25th Anniversary Celebration Schedule of Events

July 11, 10:00 a.m.-2:00 p.m.

Tour EHS Operations at the Research Park Development Building. See EHS Training Facility and Resources, Displays on Radiation Safety, Asbestos, Food Safety, Fire Safety, Environmental Compliance, and more. Drop off your personal fire extinguishers if they need recharging (for a fee). Hands on fire extinguisher experience will also be available.

July 12, 10:00 a.m.-2:00 p.m.

Tour EHS Operations at the Resource Recovery Center. See the Chemical Recycling Program, Storage Facilities for Unwanted Chemicals and Radioactive Materials, Handling of Fluorescent Lamps, Batteries, and more.

July 13, 10:00 a.m.-2:00 p.m.

Safety Expo at the Life Sciences Center. Over 30 displays by campus and City departments, and vendors on safety and environmental issues.

July 14, 3:00 p.m.-4:00 p.m.

Recognition ceremony at Life Sciences Center Monsanto Auditorium. Presentations by top administrators involved in creating and leading EHS. Recognition of campus departments and individuals who have contributed to EHS success. Refreshments follow the ceremony.