Welcome to the 2006 spring edition of the REHS Newsletter. This edition contains Environmental Health & Safety (EHS) articles pertaining to Right-to-Know/Hazard Communication, Custodial Safety, Disposal of Sharps, Electrical Safety, Relocating/Vacating Laboratories and Sustainability. If you have a suggestion for a future EHS article, please feel free to contact us through the Safety Suggestion Link on our website at http://rehs.rutgers.edu or by contacting us at (732) 445-2550.

Electrical Safety

Electrical fires claim the lives of over 500 Americans each year and injure thousands more. Electrical fires and injuries are often caused by electrical system failures and defective appliances. More commonly, these events are the result of misuse and poor maintenance of electrical appliances, improperly installed wiring, and overloaded circuits. The following are some tips that can prevent electrical hazards:

Appliances
- Purchase electrical appliances that are Underwriter’s Laboratory (UL) approved.
- Don’t allow children to play with or around electrical appliances like space heaters, irons and hairdryers.
- If an appliance has a three-prong plug, use it only in a three-slot outlet. Never force it to fit into a two-slot outlet or extension cord.
- Replace all worn, old or damaged appliance cords immediately.
- Always utilize a Ground Fault Circuit Interrupter (GFCI) when powering appliances in potential wet locations (i.e. bathroom, kitchen or outside).

- When disconnecting cords, pull the plug rather than the cord.

Electrical Cords
- Avoid placing extension cords though walls, doors and ceilings.
- Inspect cords routinely for damage (i.e. frays, tangles, cuts or missing ground prong) and dispose of any cord that is damaged.
- Never overload extension cords or wall sockets.
- Use extension cords only when necessary and only on a temporary basis.
- Never cover any part of an extension cord with newspapers, clothing, rugs, or any objects while the cord is in use.
- Use special, heavy-duty extension cords for high wattage appliances such as air conditioners and portable electric heaters.

Maintenance
- Have a licensed electrician install or repair any electrical wiring or devices.

Tools
- Check your electrical tools regularly for signs of wear. If the cords are frayed or cracked, replace them.
- Replace any tool if it causes small electrical shocks, overheats, shorts out or gives off smoke or sparks.

For information about electrical safety, please visit our website at http://rehs.rutgers.edu. If you have general questions regarding electrical safety, please contact Alex Ruiz of REHS at (732) 445-2550.
Relocating and Vacating Workspace

Whenever an individual or a department is vacating or relocating their workspace, there are many tasks to consider. Regardless if the workspace is an office, laboratory or shop area, there are always items to be relocated and/or discarded. Many times, items are left behind because the occupant is unsure of the proper disposal method. The following Questions & Answers outlines many of the concerns when a workspace is vacated or relocated.

Q. What should be done with obsolete electronic equipment (i.e. computers, faxes, printers etc.)?
A. All unwanted consumer electronics must be routed through Material Services for resale or recycling. When discarded, these items are regulated by the NJDEP as universal waste and must be disposed of properly.

Q. How are chemicals and hazardous waste transported from one location to another?
A. Chemicals are relocated by REHS or by a qualified contractor. REHS must be contacted to evaluate the quantity of chemicals to be moved and to determine if a contractor will be used. REHS will assist with coordinating the move if a contractor is utilized.

Q. How are unwanted chemicals or waste chemicals properly disposed?
A. All chemicals for disposal will be handled by REHS. Hazardous waste pick up requests can be completed online through the REHS website or completed in hardcopy and faxed to REHS. For large workspace cleanouts, please contact REHS directly at (732) 445-2550.

Q. How can I redistribute virgin chemicals that I no longer need?
A. REHS maintains a Chemical Reuse Program, where unopened chemicals are collected, posted on the REHS website and redistributed for free upon request. For more information, please visit our website at http://rehs.rutgers.edu/lsenv_reuse.htm.

Q. Who is responsible for decontaminating laboratory equipment before it is moved or discarded?
A. The PI is responsible to ensure that all equipment is properly decontaminated before it is discarded or relocated. REHS can provide technical assistance upon request.

Q. What should be done with unwanted furniture and appliances?
A. All unwanted furniture and appliances must be routed through Material Services for resale or disposal. All appliances must be properly decontaminated and have the refrigerant (Freon) removed by Facilities Operations & Services.

Q. How do I ensure my new workspace is adequate from an Environmental, Health and Safety perspective?
A. REHS will provide an assessment to ensure your new workspace has the proper Environmental, Health and Safety controls and equipment. For laboratories, the Chemical Hygiene Guide must be updated to reflect current laboratory activities.

If you have any other questions or require assistance, please call REHS at (732) 445-2550.

Custodial Safety – How You Can Help

In many instances when we clean out our work area(s), we generate a large amount of garbage and/or recyclables. Overloading trash and recycling receptacles may result in loads that are too heavy for the custodians to lift safely. When performing a clean out of your office, laboratory, or other work area, please contact Facilities Environmental Services at (732) 445-1234 in advance, to arrange for proper collection and removal of garbage and recyclable material.

Typically, one custodian is responsible for cleaning and trash removal from a building. Contacting custodial services when you are planning a large scale clean out will enable custodial supervisors to make arrangements for additional staff or more appropriate disposal containers.

Please be aware of the following:
- Overloading a paper recycling receptacle makes it more difficult to handle and may cause injury. The contents of the receptacle can become very heavy and difficult to remove and carry to the dumpster.
- Many locations have dumpsters located outside the facility. Waste and recyclables must be carried to that location and lifted into the dumpster. (Greater than four feet.)
- When disposing of clean broken lab glass, do not fill the container to the top prior to disposal. The containers can become very heavy and difficult for custodians to lift into the dumpster. Additionally, the proper poly-lined container must be utilized, taped closed when full and labeled as “Broken Glass”.
- If you are disposing of large amounts of trash after an office function, contact custodial services so that they can make arrangements for the removal of the additional debris.

Following these guidelines will help to protect our custodians from injuries and provide for efficient removal of garbage and recyclables from your workplace.
Sustainability

The concept of sustainability varies depending on your viewpoint. Some people define sustainability as an environmental movement concerned with developing processes that do not deplete the earth’s resources, such as creating electricity from wind power as compared to burning fossil fuels. Other groups broaden the definition to include Social and Economic issues as well as environmental issues, such as child labor issues. In 1987 the United Nations, World Commission on the Environment and Development, defined Sustainability as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

Many large corporations have incorporated the concept of sustainability into their business practices. By doing this, they provide products and services which are considered more “environmentally friendly”. Colleges and Universities have also begun to explore issues surrounding sustainability. Some Universities have fulltime sustainability positions and/or sustainability departments.

Rutgers University has recently formed a Sustainability Committee consisting of staff, faculty and student representatives. The purpose of the committee is to advise senior administration regarding issues of sustainability as they pertain to the greater Rutgers community. The committee is charged with the following:

- Recommend appropriate policies for sustainability,
- Assist with identifying suitable projects for sustainable initiatives,
- Assist with completing a sustainability audit of the university, and
- Recommend appropriate goals and assist with preparing an annual report on the Universities achievements.

The Committee conducted its first meeting last spring and has recently helped facilitate the University’s participation in the USEPA RecycleMania initiative. RecycleMania is a USEPA sponsored contest where Colleges and Universities from across the country compete to determine who has the most effective recycling program. To find out more about the RecycleMania contest, you can visit the Facilities Operations & Service’s website at http://www.fos.rutgers.edu/RecycleMania/Recycle.htm or the RecycleMania homepage at http://www.recyclemania.org/index.htm.

Proper Disposal of Sharps

The proper disposal of sharps is important to prevent needle sticks and lacerations for the individuals handling the waste. The word “sharps” is typically used to describe syringe needles, and other medical items. This term can also be used to describe more common items such as razorblades, glass slides, knives and glass. Basically, a sharp is anything that can easily puncture the skin. At the University, we generate sharps in both research and non-research settings.

Sharps from Research Activities

Laboratory researchers who generate sharps are trained to dispose of them properly. This training is provided by REHS and can be found at the following link, http://rehs.rutgers.edu/rehs_train.htm. Typically, sharps from research laboratories are collected in a red sharps container. Intact and broken glass is collected for disposal in a sturdy cardboard glass receptacle, additional information can be found in the University empty container policy at http://rehs.rutgers.edu/pdf_files/Labglass.pdf.

Sharps from Non-Research Activities

The University is also concerned about disposal of sharps generated outside of research laboratories. Dining services workers have found syringes under napkins on dish trays. Custodial workers have found broken glass in trashcans which if unrecognized can cause lacerations. These items should not be placed directly in the trash, but instead be placed in rigid, puncture-resistant containers prior to disposal.

If you’re a student with insulin-dependent diabetes or another condition and rely on prescription syringes for administering medication or testing your own blood, you can:

- Obtain a free syringe disposal container by requesting one at any health center.
- Dispose of the full syringe disposal container at any student health center by handing it (yourself) to a clinical person, such as a nurse, nurse practitioner, or physician. You will receive a new container in exchange.
- The health center will safely dispose of your used syringes and needles for you. This will keep your syringes and needles out of the general trash, protect the staff (Housing, facilities, Dining, etc.) who handle the waste, and ensure proper disposal.

Intact and broken glass, which is intended for disposal (non-recyclable, such as incandescent light bulbs, windowpane, etc.) must be collected in a sturdy cardboard box that can be taped shut. The exterior of the box should be marked as “glass for disposal”.

Please do your part at work, school and home by disposing of sharps properly. By doing so, you will avoid injury to yourself and others who handle your waste.
NJ Right-to-Know (RTK) and Hazard Communication (HAZCOM) are two regulations designed to provide community members and workers with information about hazardous chemicals. To help Rutgers comply with these regulations, REHS provides support for the following requirements:

Training
REHS provides training sessions to meet RTK and HAZCOM requirements. All employees who are exposed or potentially exposed to hazardous chemicals during the course of their work must attend RTK/HAZCOM training. New employees must be trained BEFORE they start working with any hazardous chemicals. Training sessions are conducted once a month for research laboratory staff and for Housing, Facilities, and Dining staff. The dates, times and locations for these sessions can be found on the REHS website at http://rehs.rutgers.edu/rehs_train.htm. REHS can also perform Department specific training sessions upon request.

Hands-on training, which is specific to the laboratory or work site, is performed by the principal investigator (or their designee) and by supervisory personnel.

RTK Inventory
Under the RTK Act, a complete chemical inventory must be submitted to the NJ Department of Health and Senior Services every 5 years. A survey update is required annually for the intermediate years. Most Research and Development laboratories are exempt from RTK chemical inventory reporting. Teaching laboratories and most departments, including Dining, Housing, Facilities, and REHS, must provide a full chemical inventory. The departmental inventories are sent to REHS, where the report is compiled and submitted to the NJDOH.

Labels
We must meet both the RTK and HAZCOM labeling requirements. All chemical labels must include the following information:
- Chemical name and Chemical Abstracts Service (CAS) number
- Top five chemicals in a mixture (hazardous & non-hazardous)
- Any hazardous ingredients, even in small quantities
- Appropriate hazard warnings (i.e. flammable, toxic, etc.)
- Name and address of the manufacturer or importer

HSFS’s & MSDS’s
Hazardous Substance Fact Sheets (HSFS) and Material Safety Data Sheets (MSDS) briefly describe all the information known about a specific chemical. Employees are required to have immediate access to these sheets, which can be paper or electronic copies. These documents are used to familiarize employees with the hazards associated with the chemicals they work with and to select the proper personal protective equipment (PPE). The description includes: known health hazards, routes of exposure, and spill response information. MSDS are created by the manufacturer, and are often shipped with the chemical. All chemical manufacturers/distributors must provide MSDS’s and many have them available online. HSFS are created by the NJ DOHSS, for pure chemicals (no mixtures) and can be obtained online at http://www.state.nj.us/health/eoh/rtkweb/rtkhsfs.htm or through REHS.

If you have questions or need assistance with these requirements, please contact REHS at (732) 445-2550.

Safety Management Awards
On behalf of the Office of the Senior Vice-President and Chief Financial Officer and the Occupational Health & Safety Committee, we are pleased to announce the 2005 Safety Performance Awards recipients. Last year, we set a goal to reduce the number of recordable accidents by 10%. This year's recipients met this challenge by reducing the number of recordable accidents by at least 10% compared to 2004 and their most recent 5 year average (99-03).

Rutgers Golf Course - Jill Jerauld and Terry Sedon
Certificate of Excellence for Zero Recordable Accidents in 2005

Lab Animal Services - Bob Harris and Elizabeth Dodemaide
75% reduction in Recordable Accidents

 Camden Facilities - Joseph Brautlecht
60% reduction in Recordable Accidents

Cooper Dining - Suzanne Paltz
60% reduction in Recordable Accidents

Intercollegiate Athletics - Kevin MacConnell
50% reduction in Recordable Accidents

Cook/Douglass Housing - Ron Lukowicz
25% reduction in Recordable Accidents

College Avenue Housing - Mike Fitzgerald
20% reduction in Recordable Accidents