Welcome to the 2007 Winter edition of the REHS Newsletter. 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 at 732-445-2550.

Rutgers First Sustainability Report

The Rutgers University Committee for Sustainability has completed its 2007 Annual Report. The report is intended to establish baseline measures of Rutgers’ performance for a variety of sustainability indicators. This report also documents the current sustainability activities at Rutgers.

The concept of sustainability is generally defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Much of this first report focuses on environmental issues, as these are better documented at Rutgers than economic and social sustainability parameters.

The following is an example of the information contained in this report:

The graph to the right shows the breakdown of the types of solid waste that the University generates and recycles (the category “other” primarily refers to construction waste). The year 2005 had an unusually low amount of construction activity.

The report includes a list of some of the educational efforts, outreach activities, and sustainability projects ongoing at Rutgers as reported by students, faculty, and staff. Additionally, some of the special activities promoting sustainability at the University are highlighted in the report. The report can be viewed online at http://sustainability.rutgers.edu.
CFC’s at Rutgers University

The abbreviation CFC stands for any of several organic compounds composed of Carbon, Fluorine, Chlorine, and Hydrogen. Developed in the 1930’s and sold under the trade name “Freon”, they were used in many applications, such as: aerosol-spray propellants, refrigerants, and solvents. During the 1970’s, scientists discovered a link between the release of CFC’s into the atmosphere and the shrinking of the Earth’s ozone layer. When CFC’s are released into the atmosphere, they do not immediately break-down, but instead travel high into the Stratosphere, where the ozone layer is. There, they break down due to the sun’s ultraviolet rays. As they break down, they react with the Ozone Layer removing ozone molecules. The Earth’s ozone layer is important to all life on Earth since it shields us from the harmful effects of the Sun's ultraviolet radiation.

Because of their detrimental effect on the ozone layer, the production of CFC’s has since been banned, although their use in existing machinery is still permitted. At Rutgers, CFC’s can mostly be found in refrigeration equipment, such as air conditioners, large chillers and refrigerators and their use and handling is controlled by regulations enacted by the United States Environmental Protection Agency (USEPA). To be certified to work with CFC’s a person must obtain a CFC license by attending a training course and passing an examination. All University mechanics that work with CFC’s must have the appropriate certification.

Since it is harmful to the atmosphere and illegal to release CFC’s into the air, special procedures must be followed before disposing of equipment that contains them. If you plan to dispose of equipment that you believe contains CFC’s, you must follow these steps:

- First contact the Facilities Department, so they can have a certified mechanic remove the CFC’s.
- After the CFC’s have been removed from the equipment, you must dispose of the equipment through Surplus and Material Services by:
  - Forwarding the Surplus Disposal Request Form to Material Services via fax to 732-445-2018 attention Peter Shergalis or as an email attachment to material@rci.rutgers.edu.

Please contact Rich Bankowski at (732) 445-2550 or rbankowski@rehs.rutgers.edu if you have questions or comments about the University's CFC compliance program.

Bloodborne Pathogen Program

A bloodborne pathogen is a microorganism found in blood or other body fluids that can cause illness and disease in people. These microorganisms can be transmitted through contact with contaminated blood and body fluids.

The two most prevalent bloodborne pathogens are human immunodeficiency virus (HIV) and the hepatitis B virus (HBV). HIV, the virus that causes AIDS, is primarily transmitted through sexual contact, though it may also be contracted through contact with contaminated blood or some body fluids. HBV attacks the liver, and is sometimes fatal. It is transmitted through saliva, blood and other body fluids. According to the Center for Disease Control (CDC), as of June 1994, there were a total of 401,749 confirmed cases of AIDS in the U.S., while approximately 300,000 people become infected with hepatitis B annually. It is estimated that a further 1.5 million people in the U.S. are infected with HIV and that most are between the ages of 25 and 49 and are active members of the workforce.

On July 6, 1993, NJPEOSH adopted federal OSHA’s regulation “Occupational Exposure to Bloodborne Pathogens”. Rutgers employees working with human blood or potentially infectious human blood, body fluids, tissues or cell lines as part of their job duties are required to participate in the University’s Bloodborne Pathogen Program.

The requirements of this program are as follows:

- Maintain a written Bloodborne Pathogen program (the Rutgers Bloodborne Pathogens Guide)
- Annual training for all potentially exposed employees
- Offers these employees the opportunity to receive vaccination against HBV.

Rutgers employees working with human blood are required to participate in the program.

If you have questions regarding the University’s BBP program please contact Shaundree Davis at sdavis@rehs.rutgers.edu or (732) 445-2550. Additional information can be found on the PEOSHA website at http://www.state.nj.us/health/eho/peoshweb/bbp.doc.
Rutgers University received Two Prestigious Awards in 2007

Rutgers University received the “Award of Merit” from The Campus Safety, Health and Environmental Management Association (CSHEMA) for the Complete Environmental Health and Safety Award Program in July of 2007. This award involved compiling a comprehensive submittal which contained descriptions and examples of our entire Environmental, Health and Safety program. If you would like additional information about this award please contact David Fernandez at (732) 445-2550 or dfernandez@rehs.rutgers.edu.

The New Jersey Department of Environmental Protection (NJDEP) awarded Rutgers University with the “2007 Clean Water New Jersey Award” in November of 2007. This award was given for outstanding contributions to improving the state’s water quality. Rutgers received the award for being a public complex that participated in local public education about preserving water quality. If you would like additional information about this award, please contact Sue Dickison at (732) 445-2550 or dickison@rehs.rutgers.edu.

Emergency Response

Do you know what to do in the event of an emergency in your building? The Rutgers Emergency Action and Fire Prevention Plan was developed to inform the University community how to prevent fires as well as what to do in the event of an emergency.

Proper action during an emergency saves lives. Emergencies may be medical, fire, chemical spills, bomb threats or other situations that may require the evacuation of the building. The priority during any emergency is the protection of human life. Following some basic steps during an emergency can help to achieve this goal.

- If you discover a fire or smell smoke, sound the building fire alarm. Know the locations of the fire stations and how they operate. Do not attempt to fight a fire due to the hazards associated with the products of combustion and the threat of a spreading fire.
- Upon hearing a building fire alarm signal, which may be a bell, horn, or voice message depending on the building you are occupying, immediately begin evacuation. Close the doors behind you. Use the nearest safe exit, but DO NOT use elevators.
- Leave the building and assemble in an area established by your supervisor, where you will not hinder the approaching firefighters and apparatus.
- If caught in smoke or heat, stay low where the air is better then attempt to reach a safe exit or area of refuge.
- Know the location of all exits from your building. All exits in University facilities are properly marked with illuminated EXIT signs and directional arrows, where applicable.
- If unable to leave your room or office due to heat or heavy smoke in the hallway, or due to physical disability, telephone University Police and give your exact location so the firefighters can be directed to you.
- Always use the universal emergency access number to reach University Police in an emergency. Activate the 9-1-1 telephone system using the procedure for your campus or other location.

You should be familiar with the evacuation routes for your building and you should also discuss a meeting location outside the building with your coworkers, which makes accounting for personnel more effective.

The Rutgers University Department of Emergency Services’ Fire Safety Division is charged with the responsibility of enforcing the provisions of the New Jersey Uniform Fire Code, and is the authority having jurisdiction with respect to fire safety regulations, policies and procedures. The Fire Safety Division is available to assist you in developing an evacuation plan for your area or building. Please take some time to familiarize yourself with the Rutgers Employee Fire Prevention and Emergency Action Plans and discuss the plan with your coworkers. This plan can be found on the REHS website at http://rehs.rutgers.edu/rehs_eap.htm. If you have additional questions about responding to emergencies at the University please contact Dave Fernandez of REHS at (732) 445-2550.
University of Washington Professor Sentenced for Improper Disposal of Hazardous Waste

A recent incident at the University of Washington has reinforced the importance of proper hazardous waste management. A professor was charged in connection with pouring a flammable substance (hazardous waste) down a laboratory sink drain. The maximum penalty for this offence could have been up to five years in prison and a fine of $250,000. In August, 2007, he was sentenced to three years of probation, 80 hours of community service and a $5,000 fine.

Rutgers University is committed to managing hazardous waste properly to ensure we protect both people and the environment. Each individual who generates hazardous waste is responsible to manage the waste properly while it is being collected and stored in their area. REHS has developed a system to provide hazardous waste management information and prompt pick-up service to the University community. This information can be found on our web site at http://rehs.rutgers.edu/. Hazardous waste pick-up requests can be made online at http://www.rutgers.edu/~rehs/forms/hazwaste.php or by faxing the completed form found at http://rehs.rutgers.edu/pdf_files/Haz-Wast-Req-Form.pdf.

In addition, Rutgers University has implemented the following in an effort to promote and ensure proper disposal of hazardous waste:

- Hazardous waste is removed without any charge-back to departments. All costs are absorbed into one central cost center.
- Hazardous waste training is provided by REHS, both online and in-person. Additional information can be found at the following link http://rehs.rutgers.edu/rehs_train.htm.
- Hazardous waste procedures, which are tailored to each university group, can be found on the REHS website at http://rehs.rutgers.edu/.
- A Waste Information Locator System has been developed to provide easy access to waste related information. This can be accessed at http://www.rci.rutgers.edu/~rehs/wif/

If you would like additional information about the University’s hazardous waste management program please contact Mark Kelly at (732) 445-2550 or mkelly@rehs.rutgers.edu.

Phase 1 Environmental Site Assessments

The University completes Phase 1 Environmental Site Assessments for all real estate purchases, prior to acquisition. This can be any property that is purchased, leased or gifted to the University. Site assessments are conducted to determine if there are any potential environmental concerns associated with a site. These assessments can be used for the following reasons:

- Prevent purchasing a site with severe environmental concerns
- Negotiate a lower purchase price for the property
- Plan for necessary restoration prior to purchase
- Lessen the likelihood for unknown contamination

A typical phase 1 assessment includes the following information:

- Onsite visual inspection
- Local geology and hydrology review
- An assessment of current land use
- An assessment of the historic land use (using fire insurance maps, city directories, aerial photographs, etc.)
- Owner/operator provided documents and records review
- Local, state, tribal, and federal regulatory agency records review

The final report includes all the above information including recognized environmental concerns, recommendations and conclusions. For additional information about Phase 1 Site Assessments, please contact Susan Dickison of REHS at (732) 445-2550 or dickison@rehs.rutgers.edu.