

RUTGERS

Rutgers Environmental
Health and Safety

REHS News

April 2007, Issue 10

Welcome to the 2007 spring edition of the REHS Newsletter. This edition contains Environmental, Health & Safety (EHS) articles pertaining to the Radiation Worker Dosimetry Program, Bats and Rabies, Completion of the EPA Self-Audit and Disclosure Program, Lawn and Garden Safety, and the new Waste Information Locator system. 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.



College Ave. Campus

National Electrical Safety Month

May 1-31

www.electrical-safety.org

Buckle Up America

May 21-28

www.nhtsa.dot.gov

National Safety Month

June 1-30

<http://www.nsc.org/>

Radiation Worker Dosimetry Program

Many researchers at the University utilize radioactive materials and/or radiation producing machines in the course of their research. REHS actively monitors a subset of these individuals for two reasons. First, to ensure that no Rutgers employee or student exceeds federal or state exposure limits. Secondly, and more importantly, we utilize our dosimetry program to determine the effectiveness of our As Low As Reasonably Achievable (ALARA) program.

When dosimeters are exposed to ionizing radiation, the radiation energy is essentially

“absorbed” into the dosimeter. When the dosimeter is exposed to heat, it releases its energy. The amount of energy released is proportional to the amount of energy absorbed, therefore giving us a very good estimate of the amount of radiation exposure a person received.



REHS issues badges to approximately 350 users. Additionally, women who wish to declare their pregnancy are issued monthly badges to measure the exposure of the fetus throughout the course of the pregnancy. Approximately 98% of badged individuals do not receive any measurable dose. Of the workers that do receive a dose, their exposures are approximately 1% of the NRC's annual dose limit. These records are kept on file at REHS and can be furnished upon request to any individual who would like a copy of their annual or quarterly dose report.

An overview of the dosimetry program, including an online badge request form, can be found on the REHS website at http://rehs.rutgers.edu/lrad_drb.htm. If you have specific question regarding dosimetry, please contact Debbie Hrabinski at (732) 445-2550.

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Radiation badges should be worn on the torso between the neck and pelvic area.

Waste Information Locator System

Do you generate waste? REHS has launched a new online system called the "Waste Information Locator" (WIL) to assist you in the identification, storage and disposal of waste generated in:

- Laboratories (chemical, biological, radiological, oils, glassware, etc.)
- Art Studios (glazes, mineral spirits, paints, oily rags, photographic, etc.)
- Maintenance Areas (cleaners, paints, oils, solvents, light bulbs, electronics, asbestos, etc.)
- Office/Clerical Locations (consumer electronics, batteries, light bulbs, toner cartridges, etc.)

This system has specific guidance for managing the wide range of waste from regulated chemicals to non-regulated batteries. Regardless of where you work within the University, this system will help you classify, label, store and ultimately

dispose of your waste according to regulatory requirements and University policy. This system was designed as an easy to use, menu driven program where you choose from the following main menus:

- Your Function at the University
- Waste Category
- Waste Type

After the appropriate waste type has been chosen, the system displays the following waste related information:

- Waste Classification
- Waste Management
- Waste Disposal

To access the system, please visit the REHS website at <http://www.rci.rutgers.edu/~rehs/wif/>.

[rutgers.edu/~rehs/wif/](http://www.rci.rutgers.edu/~rehs/wif/).

If you have questions about this program, please feel free to contact Dave Dzubina of REHS at ddzubina@rehs.rutgers.edu or by phone at (732) 445-2550.

Waste Information Locator



Bats and Rabies

Bats occasionally enter University buildings and must be removed by a trained professional with great caution, as bats are the chief source of human rabies "infection" in the United States.

If you find a bat in a room or building:

Do not attempt to remove the



bat on your own. Removal of bats from university buildings should be handled only by trained animal control personnel.

Ask everyone to leave the area and close the door behind you. Call RUPD at 732-932-7211 immediately to arrange for removal of the bat.

The bat may require Rabies testing; immediately inquire as to whether the bat will be tested and how you can obtain the results.

If you feel you may have been touched or bitten by a bat, or come in contact with bat saliva, or if you awoke to find a bat in the room, seek medical help immediately.

Weekdays:

- Faculty or staff should contact Occupational Health or proceed to the local emergency room.
Occupational Health 732-932-8254
- Students should contact the Student Health Center on their campus or proceed to the local emergency room.
Hurtado Health Center:
732-932-7402
Busch-Livingston Health Center:
732-445-3250
Willets Health Center:
732-932-9805

Weekends, evenings or holidays:

Proceed immediately to a local emergency room.

If you are a member of Rutgers' faculty or staff, report any incident, bite or potential exposure involving bats to your supervisor immediately.

Follow similar safety procedures if you find a bat at home; call the local police or animal control for assistance; seek immediate help from your local emergency room or physician.

Important things you may not know about bats and rabies:

1. Bat bites may be so small they cannot be seen and yet they may cause rabies.
2. Saliva from an infected bat can cause rabies when it comes in contact with a break in the skin or mucous membranes such as eyes, nose, or mouth.
3. Anyone in a room with a bat who is not sure whether they were exposed to or bitten by a bat will need preventive rabies treatment promptly.
e.g. a person waking up and seeing a bat present in the room or a child or elderly person found unattended in a room with a bat present.
4. Any bat bite, contact with a bat, or any incident which may have resulted in a bite or exposure to bat



Bats and Rabies (Cont.)

saliva, must be evaluated by a physician promptly.

- Human rabies is almost always a fatal infection which can be pre-

vented by prompt medical treatment with rabies immunoglobulin and rabies vaccine after an exposure.

For more information about rabies prevention, go to: http://www.cdc.gov/ncidod/diseases/submenus/sub_rabies.htm

Completion of EPA Self-Audit and Disclosure Program

In November of 2001, Rutgers became the first university in the nation to enter into a voluntary audit agreement with the U.S. Environmental Protection Agency (EPA). The audit agreement provided Rutgers with an opportunity to evaluate eleven environmental compliance programs and disclose our violations to the EPA without receiving typical enforcement action.

In September 2006, we received the EPA's final response to our last self-disclosure report. The total amount of fines would have been more than 1.4 million dollars had the EPA found the same violations during a regulatory inspection. The EPA waived all fines due to our expedited corrective actions and our commitment to preventing the recurrence of these violations. These

commitments included:

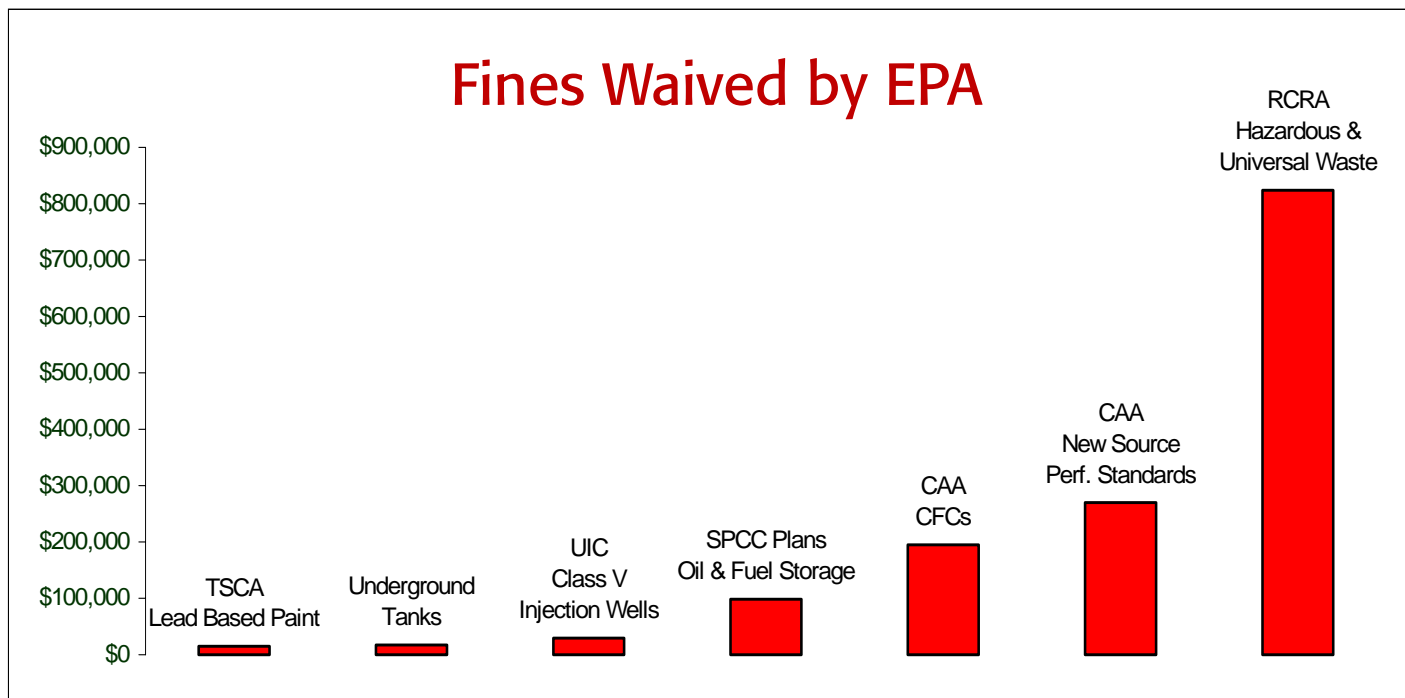
- Conducting annual Environmental, Health, and Safety (EHS) assessments for laboratories, research farms/stations, art studios, maintenance areas, etc.
- Updating and improving the REHS website, to include additional resources and to make it easier to locate information.
- Developing web-based compliance tools for laboratories, including self-inspection checklists.
- Improving EHS training, which includes online refresher training for



Rutgers First in Nation to Do Voluntary EPA Audit

Rutgers, the State University of New Jersey, has taken advantage of EPA's innovative self-audit policy and agreed to do a comprehensive environmental audit of its five major campuses and off-campus facilities. The agreement is the first of its kind between EPA and a college or university.

several topics such as Hazardous Waste Management, Right to Know, Chemical Hygiene, and Radiation Safety.



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Lawn and Gardening Safety

Spring/summer is the time of year that many of us work outdoors on our lawns and gardens. Did you know last year that:

- 76,000 people required medical treatment at a hospital for lawn mower mishaps.
- Another 7,600 people were treated for injuries associated with lawn & garden powered equipment.



The following safety tips can help you avoid injuries while working on your lawn and garden projects:

- Before operating any powered equipment read the owner's manual to ensure that you know how to properly operate the equipment and its safety features.
- Dress appropriately for the task. Wear close-fitting clothes and avoid jewelry to prevent them from getting caught in moving parts.

- Utilize the proper Personal Protective Equipment (PPE) for the task



- (i.e. eye protection, heavy gloves, hearing protection and respiratory protection).
- Do not leave garden tools such as rakes, spades, forks, pruning clippers, files and metal plant stakes lying around when not in use.
- Ensure the safety devices on equipment are in place and functioning

properly before starting work. Do not remove any devices.

- Unplug electric tools and disconnect spark plug wires on gasoline-powered tools before making adjustments or clearing jams near moving parts.
- Never work with electric power tools in wet or damp conditions. For your protection against electrocution, use a ground fault circuit interrupter (GFCI).
- Ensure that extension cords are in good condition, are rated for outdoor use, and are the proper gauge for the electrical current capacity of the tool.
- Store pesticides and herbicides out of the reach of children, on high shelves or inside locked cabinets.



- Always fill gasoline equipment outdoors, and never fill tanks while equipment is running or when it's still hot.

- Store gasoline in an approved container to prevent vapors from escaping and causing a fire. Never smoke or use any type of flame around gasoline or any gasoline-powered equipment.
- Operate equipment in well ventilated area to prevent exposure to carbon monoxide. Never operate gas-powered equipment in a closed garage, storage shed or basement.
- Avoid heat stress by wearing appropriate clothing, drinking plenty of fluids and taking frequent breaks. More information on heat stress can be found on the OSHA website at <http://www.osha.gov/SLTC/heatstress/recognition.html>.
- Apply sunscreen and wear a hat if you are planning to be working in the sun for an extended period of time.
- Use insect repellent to avoid nuisance and stinging insects.
- Be cautious when working around poisonous plants such as poison ivy, sumac or oak. The following link contains pictures and descriptions of

many harmful plants: <http://www.rcrc.rutgers.edu/harmfulplants/>.

For additional information on working safely outdoors please visit the New Jersey Public Employees Occupational Safety and Health Program (PEOSH) website at:

<http://www.state.nj.us/health/eoh/peoshweb/Outdoor.pdf>.



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