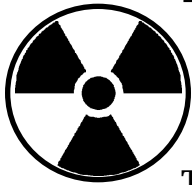


# Department of Occupational and Environmental Safety NEWSLETTER

January-February 1998 CASE WESTERN RESERVE UNIVERSITY VOL. 7 NO.1

## Radioactive Isotope Requisition Forms



The Radiation Safety Office approves 20 to 30 requests for radioactive materials each day as part of our normal office procedures.

Though the individual(s) who approve and enter the requisitions have many other duties to perform, our office processes these orders in a timely manner, usually on the same day they are received.

In order to allow our office to process isotope request forms as quickly as possible, follow these simple procedures:

1) Fax or mail the requisition to the Radiation Safety Office before 2:00 pm to ensure that it will be processed and passed on to Purchasing before the end of the day. Requisition forms are processed in the order they arrive, and we fax them on to Purchasing as soon as possible. However, we cannot guarantee that orders received after 2:00 will be processed on the same day, though they are done as soon as possible.

2) Fax or mail the requisition to the Radiation Safety Office, not to Purchasing. Purchasing will not take action on any request for material that has not come through our office, and rather than speeding up the ordering process, sending a requisition to Purchasing actually slows it down by several days.

3) Make sure the form contains all the necessary information, legibly. If the required information is not listed, we cannot process your request.

*(continued in HOT TIPS on p.3)*

## OSHA Takes Training Seriously

At least three major research hospitals or universities have been fined by OSHA over the past few months for incomplete training of laboratory staff. During their routine inspections, OSHA found workers in labs who had not completed the necessary training, including the Laboratory Standard.

The Department of Occupational and Environmental Safety offers this training every Monday from 1:00-3:00 in the Service Building Conference Room. If you as a PI have never attended this session, we strongly urge it at this time. We also recommend a thorough check of all the

workers in your lab to make sure everyone has attended, especially students. Even if you have received this train-

*See related article on page 4 about all of the available training sessions offered by DOES.*

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## FOCUS ON:

### Electric Space Heaters

Some departments perceive the need to supplement their building's heating system with electric space heaters. In general, we do not recommend doing so for two reasons.

First of all, these heaters are not efficient--they have a voracious appetite for electrical energy. They are often left connected so their operation is controlled by an internal thermostat, meaning they could operate nights and weekends when the heat is not needed.

But more importantly, they can be a serious safety hazard. Space heaters generate enough heat to ignite any ordinary combustible materials they come in contact with, such as paper, cardboard, carpet, or curtains. The appliance and its power cord can also be a tripping hazard.

If you feel heating in your area is inadequate, check your heating system outlets to see if they are being blocked by some object—furniture, plants, books, etc. Also, contact Plant Services (x2580) and ask them to check and repair or adjust your heating system if necessary.

If you absolutely positively must use a space heater, then follow these safety guidelines:

- Use only units that are in good repair, have a tipover safety switch, and are approved.
- Do not use any unit that has a frayed or worn cord, exposed elements, or is unstable.
- Plug the heater directly into an electrical outlet. Do not use an extension cord.
- Place the heater away from combustible materials.
- Keep the unit and its power cord out of walking area.
- Unplug the heater when the area is not occupied.

Please call DOES (x2907) and/or Plant Services (x2580) if you have any questions.

## Annual Laboratory Inspections

Safety Services will conduct their annual safety audits of all laboratories beginning next month. We urge PIs to perform a survey of their laboratories to make sure that all laboratory procedures follow the standards set by various regulatory agencies.

DOES performs in-house monitoring for those regulations applicable to the university including OSHA, EPA, and NFPA codes. This means that each laboratory must conform to the Chemical Hygiene Plan submitted by each PI and the Chemical Safety Manual so that, should OSHA, EPA, or fire department inspectors arrive, they will find that the university has adhered to all the necessary requirements.

DOES technicians will be focusing on the following topics during inspections. Check your lab to make sure all the elements in each section are properly addressed.

- Safety information (OSHA): the CWRU Chemical Safety Manual, which most labs chose  
*(continued on p.3)*

### Upcoming Training Sessions

#### Radiation (x2906)

- **New Training:** Feb.27(9-12); Mar.10(1-4), 19(9-12), 27(1-4)
- **Retraining:** Feb.23(1-2); Mar.3(10-11), 13(2-3), 26(10-11)
- **X-ray Training:** call office to set up training session

#### Chemical (x2907)

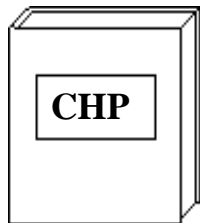
- **OSHA Lab Standard:** Mondays 1-3 (Service Building Conference Room)

#### Bloodborne Pathogen (x2907)

- **New Training:** Mondays 3-4:30 (Service Building Conference Room)
- **Retraining:** (Service Building Conference Room) Feb. 25(10-11); Mar. 10(10-11), 26(2-3)

# Annual Laboratory Inspections

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as their Chemical Hygiene Plan (CHP), is present in the lab and easily accessible to all workers; a copy of that lab's CHP and chemical inventory has been submitted to Safety Services; all employees

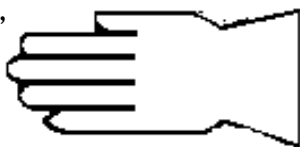
have attended the required training sessions.

- Lab signage: emergency information is posted on doors and phones and the Chemical Hygiene Officer and Principal Investigator are identified; various signage is in place, i.e., radiation, no eating, biohazard; designated areas are clearly identified as carcinogen, reproductive toxin, or highly toxic.

- Formaldehyde: if used in the lab, it is used as stated in each lab's protocol (according to the formaldehyde questionnaire submitted following participation in OSHA Lab Standard).

- Fume hoods: recent inspection sticker is present; it is clean and orderly, with no chemicals being stored in it; laminar flow hoods/biological safety cabinets have been tested within the year.

- Personal protective equipment: safety glasses/goggles, lab coats, gloves are present; if respirators are used, all wearers have participated in the Respiratory Training program; safety showers and eyewashes are easily accessible and free from obstruction.



- Chemical storage: flammable materials are in approved cabinets or total inventory is less than three gallons; all containers are labeled with the chemical, the date, and the researcher's name; they are stored by type, NOT only alphabetically; shelving and stacking is appropriate, with no glass containers on the floor.

- Cylinder storage: if not in use, compressed gas cylinders are tied down securely, stored away from heat, and capped; if in use, cylinders have the proper regulators.



## HOT TIPS



### Radioactive Isotope Requisition Forms

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Each form must identify:

- name of the Authorized User and an authorized signature for isotope purchases (the AU or an approved designee as indicated on Form 5, page 9 of the Radiation Safety Manual).

- delivery location, room number, and phone number of the lab.

- the vendor from which the material is being ordered.

- the catalogue number of the isotope ordered.

- the quantity and activity, given in uCi or mCi.

- the isotope (i.e., <sup>32</sup>P, <sup>35</sup>S, or <sup>3</sup>H) and the chemical compound.

Complete isotope ordering procedures are listed in the Radiation Safety Manual. Please refer to this section if you have further questions concerning how to fill out the forms or what information is needed, or call our office and ask.

Our fax number is 368-2236; our phone number is 368-2906.

- General Housekeeping: walking areas are clear and unobstructed; work surfaces are uncluttered and clean; doors open outwards and are not propped open.

- Waste disposal: if chemical waste is generated, it is properly labeled "hazardous waste"; SHARPS are placed in the appropriate rigid container; all perceived biohazardous waste is disposed of in red bags.



# OSHA Takes Training Seriously

(continued from p.1)

ing in the past, we recommend that you attend again whenever you feel the need for a “refresher” course. Everyone getting the same training also provides a degree of uniformity and sets a standard for everyone to follow.

But compliance isn't the only issue—what really matters is laboratory safety, and with a staff incompletely trained, the safety of a lab is compromised.

Incorrect or unsafe procedures may be carried out; general lab hygiene and lab safety problems may occur. Individuals responsible should make sure that the staff working under them are aware of safety protocols. Monitor their actions, take the time to correct them if necessary, and make yourself accessible to answer questions they may have. Ultimately, these actions will save time and reduce hazards in

the laboratory.

Please make sure that your lab is made as safe as possible by having everyone fully trained. Check our website (<http://does.cwru.edu>) or page two of this newsletter for times and dates of upcoming training sessions. Call our office if you are unsure who requires training or if you have any further questions (x2907).

## Compliance Issues: Departmental Training

Nearly all researchers on campus must take part in training programs, whether one works with radiation, hazardous chemicals, or biohazardous materials. These training programs, offered by the Department of Occupational and Environmental Safety (DOES), meet the standards set by various regulatory agencies such as the Nuclear Regulatory Commission (NRC) and the Occupational Safety and Health Administration (OSHA).

Initial training of workers takes place in a variety of ways: all faculty and staff employees are trained when they begin work at CWRU, whereas students are trained based on lists provided by department. Some employees and students are trained based only on reports of their position at CWRU to DOES from individual PIs. Regard-

less of their employees' status, it is the responsibility of each PI to assure that their employees receive necessary safety training.

Those required to attend and how often vary for each different area of research. Below are the programs offered by DOES designed to help keep each laboratory safe and to assist compliance with state and federal agencies.

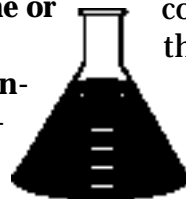
**If you work with chemicals you may have to attend one or more of the following:**

**1. The OSHA Lab Standard:** an orientation program required for new employees and highly recommended for everyone. This program defines OSHA Lab Standard requirements; outlines what training, safety materials, and documentation each lab needs to comply; teaches how to find information about hazard-

ous substances, as well as recognition of and preventative measures in dealing with hazardous substances; covers common safety oversights; and discusses the OSHA formaldehyde standard. All PIs will receive an update during the coming year when discussion of each laboratory's Chemical Hygiene Plan takes place. However, any current employee who desires a “refresher course” is strongly encouraged to attend one of these sessions, especially since so much new information has been added.

Find out what you need to know. The session is held weekly on Mondays from 1:00-3:00 in the Service Building 1st floor Conference Room.

**2. The Formaldehyde Standard:** Any employee who has the “potential to be exposed [ $>0.5$ ppm] under reasonable and



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# Compliance Issues: Departmental Training

(continued on p.5)

foreseeable conditions of use” of formaldehyde is required by OSHA to attend this training session. Because 0.5ppm is extremely low (below the odor threshold for most people), DOES asks that ALL persons working in a formaldehyde-using lab attend. Topics include: recognizing formaldehyde exposure, overview of exposure limits, labeling and handling requirements, and recognizing when monitoring is necessary. As stated above, the definition and application of this standard is included in the Lab Standard Orientation.

### If you use a respirator:

**3. Respiratory Safety Program:** required for all workers whose responsibilities may require the use of a respirator. It consists of three parts: training, medical approval, and a fit test. Also covered are limitations of respirator use and how to choose the proper cartridge, as well as providing quick fit-test checks. The use of a respirator without OSHA-defined training is in direct violation of the federal law.

### If you work with bloodborne pathogens:

**4. Bloodborne Pathogen training:** any worker who may be exposed to human blood, blood products, or bloodborne pathogens in the course of research must attend this training session. It covers Bloodborne Pathogen Standard requirements for laboratories and instructions for obtaining the hepatitis B vaccination. New employees must receive initial training within ten days of beginning work; all who work with bloodborne pathogens are required to attend the re-training session yearly. The initial training session is offered weekly on Mondays from 3:00-4:30 in the Service Building 1st floor Conference Room; check the DOES home page (<http://does.cwru.edu>) or page 2 of this newsletter for re-training dates. Employees can refuse the



hepatitis B vaccination by providing a signed declination statement; however, anyone who initially refuses the vacci-

nation can receive it at any time in the future.

### If you work with radioactive materials:

**5. Radiation Safety training:** all new employees must attend a training session and all radiation workers must attend re-training sessions once a year. New employees will receive training session dates at the orientation; employees already on staff will be informed by their PI when they are scheduled for re-training. Check the DOES home page (<http://does.cwru.edu>) or page 2 of this newsletter for training dates.



### Safety Manuals Available

In addition to the orientation and training sessions designed to give researchers an overview of procedures and safety protocols, many CWRU safety manuals exist to give more detailed coverage of safety standards and procedures:

**For those working with chemicals:** The CWRU Chemical Safety Manual has been adopted by most laboratories working with chemicals as their Chemical Hygiene Plan (CHP), as required by the Lab Standard. A revised version of this manual has recently been approved by the Laboratory Safety Committee and will soon be provided to all laboratories. It is currently available on the DOES home page.

**For those working with bloodborne pathogens:** the CWRU Occupational Exposure to Bloodborne Pathogens is available for information (this section of the Safety Manual is revised yearly). In addition, a general biosafety manual published by the National Institute of Health called *Biosafety in Microbiological and Biomedical Laboratories* provides information on laboratory biosafety procedures.

**For those working with Radiation:** The Radiation Protection Procedures Manual is present in all labs using radioactive materials.

These training sessions and manuals are pro-

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# Compliance Issues: Departmental Training

*(continued on p.5)*

vided to meet the safety standards set by government regulatory agencies and to give researchers the information they may need to know on a daily basis. However, the safety of each laboratory and the campus is ultimately dependent upon each individual researcher. All laboratory directors have responsibility for each other and must be knowledgeable and safety-minded in all areas of lab work. Safety regulations are designed with a single purpose: keeping you and those around you SAFE.

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