"Safety Comes First"

Case Department of Occupational and Environmental Safety

In this issue:

Holiday Decorations: Play It Safe

"[T}he decorations we use can potentially lead to serious safety hazards if we are not careful. We need to be

("Holiday Decorations: Play It Safe" continued from page 2)

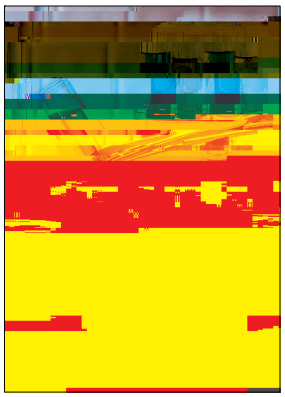
If the fire is manageable, and ONLY if you have been trained, use your fire extinguisher. Only attempt to put out the fire after the alarm has been sounded and the evacuation of the building has begun.

CAUTION: If you are NOT trained to used the fire extinguisher, sound the fire alarm and get out of the building.

Enjoy the holidays and please, BE SAFE.

Contact DOES at x2907 if you have any questions or concerns about holiday decoration displays.

Laboratory Management, Access and Security—A PI's Responsibilities



(continued from page 1)

Laboratory Access

The PI or his / her designee authorizes access to the laboratory. Persons requesting to use the laboratory or equipment must be advised of potential hazards in the laboratory and all biosafety guidelines presented in this manual.

Access to the laboratory is restricted when work with infectious agents is in progress, after hours, or when laboratory personnel are not available. Persons at increased risk of acquiring infection or for whom infection may be unusually hazardous, should not be allowed to work in the laboratory. This category includes the following:

Children

Individuals who are immunosuppressed, immunodeficient, or undergoing immunosuppressive therapy

Laboratory Security

Certain biohazardous microorganisms and toxins may be of interest to persons or groups involved in terrorism or other illegal activities. Therefore infectious agents that could pose a serious threat to humans, agriculture, or the livestock industry should be kept under secure conditions within the laboratory. The highest level of security is reserved for materials referred to as Select Agents. Work with these agents require implementation of a Biosecurity Plan. The Case Western Reserve University Select Agent Facilities maintain separate biosafety manuals and security plans.

If a request is received from another institution or corporate entity for a dangerous organism for academic purposes, the PI is responsible for ensuring that the receiving entity is a valid research organization and that the transfer has administrative approval from both institutions. When a request is received, the PI must notify the University's Biological Safety Officer for approval to send or receive any agent.

IMPORTANT: It is the objective of all Case Western Reserve University laboratories, and their management to practice safety in science and to exercise all reasonable and prudent precautions generally accepted as research industry standards. Guidelines recommended by the CDC and NIH for biosafety at levels 1 - 4 will be strictly observed and enforced by the PI and assigned laboratory facility management. At the conclusion of initial personnel safety training by DOES, each laboratory employee will be trained by the CHO and the ECO responsible for that laboratory.

Article Source: *CWRU Laboratory Biosafety Manual*

"Access to the laboratory is restricted when work with infectious agents is in progress, after hours, or when laboratory personnel are not available."

Radioactive Waste Segregation

(*article continued from page 4*)

3. Liquid waste. Liquid waste should also be separated by isotope and chemical class (regulated, non-regulated) to facilitate disposal. No solids should be present.

Every container of liquid waste must be accompanied by a separate completed Disposal Listing for Liquid Radioactive Materials form. Be sure to list all of the chemical constituents, the percentage of each chemical and the pH of the waste so that we may determine specific disposal procedures after it decays. "Aqueous waste" is NOT a sufficient description. Liquid waste must also be noted on the Radioactive Waste Disposal Form.

Aqueous radioactive liquids ready for disposal should have a pH between 5 and 9.

Liquid waste containers should not be larger than 5 gallons. It is too difficult to carry and pour if the container is larger than 5 gallons; larger sizes will be accepted only for decay in storage and for non-sewer disposable regulated chemicals and will not be returned to the researcher until the waste is disposed of. Be careful that the plastic container used is not soluble in organic materials. Those with high chemical resistance include unmodified polypropylene, polytertafluororthylene (Teflon) and polytri-fluorochloroethylene. The Radiation Safety Office does not provide liquid waste containers. It is the responsibility of the lab to purchase the containers needed. Glass containers are discouraged from being used. It is preferable to use Nalgene or equivalent returnable bottles.

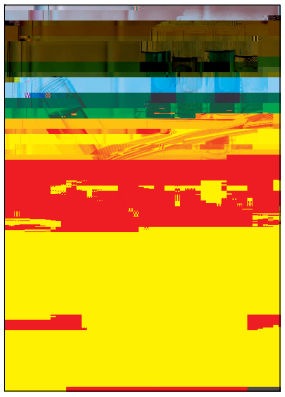
Do not fill liquid waste containers to the brim. Doing so is a spill hazard. Please keep the liquid waste level at least 1 inch below the neck of the bottle. Over-filled containers will not be picked up.

All radioactive liquid waste must be double-contained to serve as a precaution against leaking. The outer container must be leak-proof and able to hold all of the liquid should a breach of the inner container occur. A Lucite shielded container or even a five-gallon bucket is suitable for this job. Placing the bottle in a radiation bag is NOT acceptable double containment. (*continued on next page*)

"All radio-active liquid waste must be double-contained to serve as a precaution against leaking."

"Make sure everyone in your lab is aware of the procedures involved and knows how to properly prepare waste for disposal."

Thinking ahead—Plan Each Lift



Electronic waste (e-waste) is discarded electronic devices such as computers, fax machines, televisions, lab equipment, or other such devices that contain circuitry (Figure 1). This type of material contains lead and other substances that, if not handled properly, could be released into the environment and cause harm.