

# Case Department of Occupational and Environmental Safety

*“Safety Comes First”*

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## *Construction Safety: A Necessary Precaution*

With the road construction along Euclid Avenue, the reconstruction of the Adelbert Road overpass, there are many things to keep in mind in order to stay safe.

### **When walking:**

- Follow signs and stay on designated paths. Do not venture into a construction area for any reason without proper PPE (hardhat, glasses, etc.) and authorization from the foreman in charge.
- Watch for vehicles where you are not normally used to seeing them. While this has presented a parking problem for several areas, this also can mean vehicles backing in and out of the construction site – often, these drivers have a limited range of vision, so give them as wide a berth as possible.
- Be aware of construction actions in motion. This can include overhead\ cranes as well as overland transport and pulling.

### **When driving:**

- Be careful of construction vehicles on the road and give them ample distance, even more so than when walking. This goes for all driving locations – each year, hundreds of workers die due to construction-related highway accidents.
- Never attempt to circumvent a posted detour. While this may seem like common sense advice, numerous accidents are caused each year by impatient drivers looking for shortcuts. Construction workers and barricades are there for a clear reason. Follow all posted detours.

- Plan ahead. If you know construction is ongoing in a particular area, allow extra time to get to and from your destination. Be reasonable—expect delays.

With so many large-scale projects in process around the Case community, construction can often be frustrating, but as our University is improved and expanded, keep safety concerns in mind for both yourself and the workers who are doing their jobs.

***“If you have any questions regarding your ergonomic needs and work area assessments, please contact Shirley Mele at [smm5@case.edu](mailto:smm5@case.edu)”***

## *Ergonomic Safety Program at DOES*

In order to meet the needs of the Case Community, The Department of Occupational and Environmental Safety (DOES) has ergonomic and work area assessment programs in place. We currently have one Safety Ergonomics Specialist (Shirley Mele) on staff. If you wish to schedule a time for Shirley to meet with you, please contact her at ext. 2906 or at her personal number, ext. 3149, and she will fax or campus mail you a copy of the DOES Office Ergonomics Questionnaire to fill out and return to the office. Upon the return of the questionnaire, Shirley will schedule a time to meet with you and to evaluate your work area. If you have any questions regarding your ergonomic needs and work area assessments, please contact Shirley Mele at [smm5@case.edu](mailto:smm5@case.edu). Her hours are Monday through Friday from 8:30 am to 5 pm.

## *Security of Radioactive Materials*



***“All radioactive materials, including stock solutions as well as stock vials, must be secured against unauthorized access.”***

As with all hazardous materials, care must be taken when storing radioactive materials. All radioactive materials, including stock solutions as well as stock vials, must be secured against unauthorized access. While it is not necessary for radioactive waste to be secured, it must be kept in a designated waste area of the laboratory and its activity sensibly minimized. Even if you are in another part of the laboratory, the radioactive material must be in your line of sight. If it is not, it is not considered secured. For instance, if you have a stock vial on the bench and you leave your laboratory unstaffed for even a few minutes, the laboratory must be locked or the radioactive material must be placed in a lockable refrigerator or in a lockbox that is secured inside the refrigerator. If you have a refrigerator labeled for radioactive material that is currently not being used for radioactive material storage, the refrigerator must either be locked or decommissioned.

During recent routine security checks by our staff, it was also noted that empty lead pigs labeled radioactive are being placed on lab benches. These pigs are still considered to be unsecured radioactive material unless the label has been defaced. The Radiation Safety Office will pick up empty lead pigs; however, the lab must survey the lead pigs and deface the labels prior to pickup by the Radiation Safety Office. Please contact the Radiation Safety Office at ext. 2906 if you want to dispose of your lead pigs.

***“For those  
Building  
Safety  
Coordinators  
who have  
completed  
training,  
please  
remember to  
periodically  
review your  
assigned areas  
so that you are***

It is vital for the safe disposal of radioactive waste that it be properly segregated and labeled. Below is a listing of each type of radioactive waste and how it must be disposed of.

1) **Dry solids.** *Separate dry waste by isotope*

***“Scintillation fluid and any item containing scintillation fluid must be disposed of separately from dry waste. Only biodegradable scintillation fluid is to be used.”***

(continued from page 4) procedures after it decays. "Aqueous waste" is NOT a sufficient description. (If the waste is 100% water, say so.) 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 10.
- €# Put liquid waste in containers no larger than 4L. It is too difficult to carry and pour if the container is larger than 4L; 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, polytetrafluoroethylene (Teflon) and polytri-fluorochloroethylene. Glass 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 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.
- €# Use recyclable containers whenever possible rather than single-use containers such as milk jugs or tissue culture flasks, which must be disposed of after the liquid waste is poured out. This creates large amounts of unnecessary radioactive waste. Instead, use reusable containers (sold by Fisher Scientific and other companies) to hold waste. Each lab should have two such containers; when one is ready for disposal, the other can be used. We will return the first as quickly as possible.
- €# When ordering, pick sizes that are easy to handle and that are appropriate to the amount of waste your lab produces. We recommend one-gallon containers unless your lab produces a large amount of short-term waste; then we can supply five-gallon containers.

**4) Animals or animal waste.** *All radioactive animals must be logged in.* However, due to new construction, contact the Animal Research Center (ARC) directly before disposing of any animal or animal waste. ARC can provide you with detailed information at x3490.

Laboratories in University Hospital buildings may make arrangements for disposal during regular waste pick-ups. All containers prepared for disposal must be properly sealed and labeled; also make sure the accompanying forms are completely filled out before you call for a waste pick-up. We encourage all labs to arrange for frequent pick-ups in order to reduce the potential hazard that exists when large amounts of waste are present in the lab. This also reduces the amount that must be picked up at one time. As you can see, there are many segregation and disposal issues to consider when dealing with radioactive waste. Make sure everyone in your lab is aware of the procedures involved and knows how to properly prepare waste for disposal. Call the Radiation Safety Office (x2906) if you have any questions.



## *Case Laser Safety Updates*

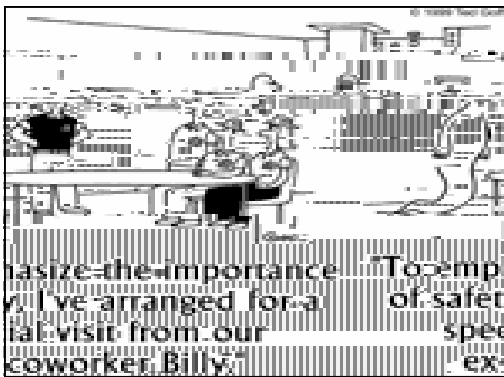
The Case Laser Safety Program Audits and Hazard Assessments are now underway. The Laser Safety Program will focus on training requirements, inventory, hazard assessments, and appropriate signs. Everyone using a Class 3b or Class 4 laser must attend the initial Laser Safety Class. Contact **H. Wayne Justice, DOES at x.4600, ext. 1.**

DOES would like to remind all laser users that the appropriate class laser signs are available. Specific instructions should be posted on the signs below the starburst. Several new Laser Guidance Sheets are available to assist you in providing a more thorough understanding of the ANSI Z136.1-2000 requirements:

- €# Posting of Signs and Labeling Requirements
- €# Writing of a Laser Site SOP
- €# Pamphlet of Sample Laser Calculations
- €# Class 4 Controlled Entry Requirements for Curtains and Interlocks
- €# An overview of ANSI Standard Safety Controls may be found on the Internet under "OSHA Technical Manual, Section III, Chapter 6"

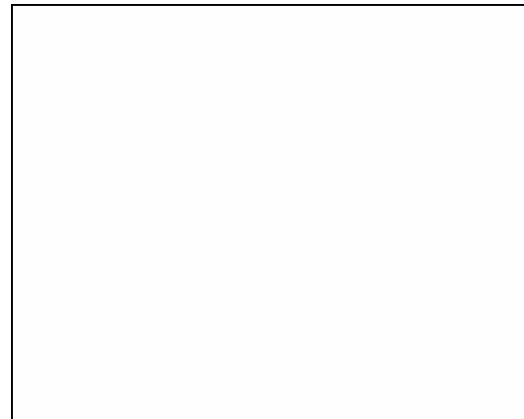
Please be sure to check our website <does.case.edu> for the new laser training schedule and contact Mr. Justice for specifics at x.4600, ext.1

### *Humor Corner*



*According to the International Labor Organization (ILO), deaths due to work-related accidents and illnesses represent 3.9 per cent of all deaths and 15 per cent of the world's population suffers a minor or major occupational accident or work-related disease in any one year.*

***PLEASE THINK SAFETY FIRST!***



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