



↵ UC IRVINE RADIATION SAFETY NEWSLETTER ↵

Volume V, #1 (Winter 2009)

Prepared and distributed by the staff of the Radiation Safety Division of EH&S

The purpose of this newsletter is to keep radioactive material users at UC Irvine informed regarding campus radiation safety policies and procedures including tips to improve safety. Visit the EH&S website (www.ehs.uci.edu) under "[Radiation & Laser Safety](#)" for previous issues of this newsletter and more information on radiation safety.

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RADIOISOTOPE INVENTORY UPDATE REMINDER

Remember that EH&S requires that your radioisotope inventory in the online CiBR-Trac system be updated at least every 6 months. We sent out an email reminder message this month (January) to all PIs with Radiation Use Authorizations (RUAs). The web address for the CiBR-Trac system is <http://ucirvine.ecompliance.net/index.jsp>. There is also a link to CiBR-Trac at the upper right corner on the main EH&S webpage, www.ehs.uci.edu.

Please do not decay correct the radioactivity in your individual vials. This is performed automatically by the CiBR-Trac system when you save changes and print a copy of your updated inventory for your lab's radiation safety records notebook. ***To print, use the blue link on the left side menu that says "Print" after the RUA number.*** A pop-up window will appear that asks you to select which report to generate; select "Inventory Report". **DO NOT** use the black print button in the upper right of the screen as this will just print what is on the screen.

Often it is not the PI who updates the lab's radioisotope inventory; rather, it is the lab manager, a senior technician, or a postdoc in the research group. New CiBR-Trac system users need to be approved by EH&S since we do not want unauthorized personnel accessing radioisotope inventories. To get a login approval, go to the CiBR-Trac website above and click on the blue underlined "[login request form](#)" link.

If you have any problems with navigating the CiBR-Trac inventory system, please contact the EH&S Radiation Safety staff at 949-824-6200. We are always happy to assist you!



STOCKPILING/OVERFILLING RADIOACTIVE WASTE CONTAINERS

Always dispose of dry and liquid radioactive waste containers promptly when they are full. There is no advantage to hanging onto full containers since it is unlikely the cost for disposal will decrease in the future. More likely, it will rise due to limited radioactive waste storage sites in the U.S. and tightening environmental and transportation regulations.

In addition, in the case of liquid waste, disposing of full containers in a timely manner reduces the chance of them causing a sizable radioactive material spill. **Please make sure that you never fill liquid waste containers past the full indicator line (“Do not fill past this line” is imprinted on the container near the top of the jug).** The space above that line is there to permit volume expansion with temperature and to reduce the chance of the liquid leaking out of the container during transport back to EH&S.

When dry radioactive waste boxes are full, they should be closed at the top and sealed with strapping tape. On many occasions EH&S Radiation Safety personnel have noted overfilled waste boxes in labs. In some cases, lab personnel have continued to attempt to toss additional contaminated items into those full boxes and those items have ended up on the floor.

☞ **Remember that radioactive waste disposal fees are based upon the weight of the waste disposed of (measured in pounds) or the volume of waste disposed of for LSC vials and animal carcasses only (measured in cubic feet).** The fees are not based upon the volumes of the containers. Therefore, if you have partially filled waste containers and there are no plans to use that radioisotope again in the near future, there is no advantage to keeping the waste in your lab.



MEMORABLE QUOTE

“If there is a possibility of several things going wrong, the one that will cause the most damage will be the one to go wrong”.

One of Murphy's Laws



RADIATION SAFETY RECORDS

EH&S is frequently asked how long it is necessary for labs to retain radiation safety records such as radioisotope receipt/use logs and contamination monitoring records. **We require that all radiation safety-related records be kept a minimum of 3 years.** If you want to keep them for longer periods, that is fine. In fact, there are some research groups which have stored radiation safety records going back to the 1970s!

Always organize your radiation safety records in *chronological order*. Most labs have the recent records on top in their notebooks, with the older records further back. However, some labs have the older records up front, proceeding to the recent records at the back. Either method is acceptable to EH&S as long as you are consistent with your method.



RADIATION SAFETY TRAINING

There are 3 components of radiation safety training which are required at UCI:

- ❖ **Radiation Safety Part I**, which is an online course that must be completed prior to the use of radioactive material. EH&S rarely finds individuals working with radioisotopes in research labs here who have not completed this training. *General* radiation safety information is provided in this course.
- ❖ **On-the-Job Training**, during which the *specific* radioisotope procedures which will be performed in the lab are taught to new staff members by the PI or by experienced staff members. This type of training must be conducted until the trainee is comfortable in performing the manipulations independently and this must be documented on an *On-the-Job Training (OJT) Form* which is completed and returned to EH&S. This form can be found and downloaded under *Radiation Safety Training Requirements* at this link: <http://www.ehs.uci.edu/radsafe.html>
- ▶ ***It is not unusual for EH&S to find that people who have worked in research labs for a long time have failed to return the OJT form to us.*** Please be diligent about doing that once you are trained.

- ❖ **Radiation Safety Part II**, which is a 90-minute classroom course. This course, which is offered six times per year, must be completed within 6 months of starting work with radioisotopes. More in-depth information on *general* UCI radiation safety-related policies and procedures is provided in this course beyond the introductory material presented in the *Radiation Safety Part I* course.
- ▶ **It is also not unusual for EH&S to find lab staff who completed *Radiation Safety Part I* years ago but have failed to attend this class.** The previous version of this training course (the *Radiation Safety Seminar*) was a 6 hour course presented in two 3-hour sessions on 2 different days. In an effort to be very respectful of attendees' time, EH&S has consolidated this class to cover the most important information they need to know to work with radioisotopes safely at UCI. If you are due (or overdue) to take the *Radiation Safety Part II* course, you can enroll at the UCI Training & Employee Development (TED) website (www.ted.uci.edu).

YES! ▶



SECONDARY CONTAINMENT FOR RADIOACTIVE LIQUID WASTE

Liquid waste containers must be stored in *secondary containment* (plastic pans, etc.) of sufficient size to contain a spill or leak. Normally, inexpensive plastic wash pans similar to those above are used for this purpose. Make sure that secondary container is made of impermeable material (ideally, plastic; no wood!) and is large enough. Plastic dinner-type trays are not of sufficient volume to contain a sizable spill/leak.

NO! ▶



👉 **If you have any questions about radiation safety, please contact EH&S at 949-824-6200. We will be happy to assist you with any radiation safety-related matter!**

