Every two years, the Ohio Department of Health (ODH) performs a routine inspection of the University of Cincinnati Radiation Control and Safety Program (RCSP). The last inspection took place in the summer of 2013 and the next inspection is expected during the spring/summer of 2015. During the last inspection, the inspectors visited research labs, irradiators and medical areas. Few violations or areas-of-concern were observed by the inspectors.

Most Authorized Users (AU) and radiation workers will eventually be involved in an inspection by the ODH. An ODH inspection may be stressful to some individuals, especially if they are not or don’t feel prepared. Inspections should not be a source of stress and should be seen as an essential part of the regulatory process. The ODH is required to perform a firsthand review of the condition of the radioactive material license at the University of Cincinnati (UC). The primary goal of a routine ODH inspection is to ensure that UC complies with their legal responsibilities. The best way to prepare for an inspection is to maintain a good radiation safety program year-round. One of the Radiation Safety Office’s (RSOf) roles is to provide training and guidance to build consistency and confidence in radioactive material (RAM) users. This role includes performing audits and surveys to ensure laboratories are using RAM safely, while indirectly helping to prepare workers for ODH inspections.

Maintaining a good radiation safety program year-round can be accomplished by knowing and understanding the policies in the Authorized User Manual (AU), keeping complete and accessible records, and supporting a well-trained staff. Document required information and maintain records in an organized file. Keep the laboratory clean and orderly at all times. Keep up a focus on professional development. Finally, always look for ways to improve. If you follow the preceding suggestions, you should never be concerned about an ODH inspection.

Do not alter laboratory practices during an ODH inspection. Individuals should work with confidence, and not fear or be intimidated by an inspector.
**How to Do Well on An Inspection (Cont)**

Remember that the inspector’s goal is not to uncover as many non-compliances as they can during their walk-through of the lab; their goal is to review the performance of the RCSP and to identify actual or potential regulatory concerns. Laboratory personnel should be courteous and professional with the inspector. The best results are obtained when friendly and sincere answers are given. Provide all requested records promptly. Maintain a positive attitude and give honest answers to questions. Don’t hesitate to say, “I don’t know, but I will find out” or “I don’t understand the question.” Write down any deficiencies noted during the inspection and contact the RSOf for assistance in correcting those deficiencies.

The following are examples of questions you may be asked by an ODH inspector.

- What radionuclides do you work with?
- What training have you had?
- How did you get your RAM?
- Where is your RAM stock stored?
- What do you do with your empty RAM box?
- How much RAM do you use at a time?
- How do you keep track of your RAM inventory?
- What do you do prior to working with RAM?
- How do you survey your work area?

Inspections are a valuable resource to evaluate the effectiveness of the RCSP. The RCSP has a reputation for being an excellent radiation safety program. With the assistance of you and the ODH, this reputation can and will continue.

**Audit Questions and Answers**

**Question:** How long is it recommended that RAM waste be kept in the lab?

**Answer:** It is recommended that RAM waste be kept in the lab no longer than 1 year.

**Question:** How long are laboratory surveys required to be maintained in the lab? How long are inventory records required to be maintained in the lab?

**Answer:** Laboratory surveys and inventory records are required to be kept in the lab for 3 years.

**Question:** When may a “no-use” survey be completed?

**Answer:** A lab may document “no-use” for a room in lieu of a survey when the lab has no RAM in possession. Minimum documentation for "no-use" should include the date of the last clean survey, the date of last use, and the date of documentation of "no-use". Records must also indicate a prior clean survey that was performed after the date of last use.

**Question:** When may a limited monthly survey be completed?

**Answer:** Storage is considered a “use”. A lab may perform a limited survey of a room if RAM has been stored in the room but there was no use of the RAM.

**Question:** Is it required for pregnant radiation workers to declare their pregnancy in the lab?

**Answer:** No, declaration of pregnancy is voluntary. If a radiation worker does declare their pregnancy, the declaration must be in writing to the RSO.

**Question:** What are the three principles to maintain ALARA?

**Answer:** Time, Distance, and Shielding. Reducing your time while working with RAM will reduce your radiation exposure. Maximizing your distance from RAM sources will decrease your radiation exposure by the inverse square law. Utilizing the appropriate shielding is a highly effective way of dose reduction.
Over the past year, there have been several changes made at the RSOf. Changes made are in regard to radioactive material (RAM) packages, survey meters, dosimeters, inventories, and annual retraining. These have been made in order to increase RSOf customer service. This will also help maximize the efficiency of the RSOf and the RAM-Use labs.

Packages
The RSOf is now delivering RAM packages to labs. According to the Radiation Safety Committee (RSC) Policy 98-1, RSOf personnel may deliver RAM packages when an approved delivery time is made between the RSOf and the receiving laboratory. RAM packages may also still be picked up from the RSOf. Whether a RAM package is delivered to the lab by the RSOf or picked-up at the RSOf, the authorized user (AU), or an individual designated in writing by the AU, must be available to receive the package or pickup the package. The following are acceptable methods for designating an individual:
The individual is listed as a radiation worker under the authorization.
The AU provides a signed and dated list to the RSOf of individuals who may pick up/receive radioactive material.
The AU provides a signed and dated list of other AUs’ radiation workers who are authorized to pick up/receive radioactive material.
A letter is provided at the time of pickup/drop-off.
The individual is designated as the “contact person” on the order form.

Survey Meters
The RSOf is also now picking up and dropping off survey meters for calibration. When a lab’s survey meter becomes due for calibration, the RSOf will contact the lab to verify the meter is available, working, and the battery has been checked. Once calibrated, the RSOf will drop the meter off to the lab and have a lab member sign that the meter was returned. As with packages, labs may also still pickup and drop off meters for calibration, as has been done in the past. Also as a reminder, “loaner” survey meters are available at the RSOf should a lab need to borrow one.

Inventories
Under UC’s RCSP, RAM must be inventoried from “cradle to grave” in order to maintain accurate inventory records for unsealed and sealed sources. The RSOf will send out a copy of AU’s Unsealed Source Inventory by the first day of the first month of each calendar quarter (January, April, July, and October). A copy of AU’s Sealed Source Inventory will be sent out by the first day of the second month of each calendar quarter (February, May, August, and November). The AU, a backup AU, or an AU designated individual should physically check the RAM in the lab against the printout provided by the RSOf. Any discrepancies should be noted on the printout; the printout should be signed and then returned to the RSOf by the 15th day of the month to avoid a non-compliance.
As a change, AUs without RAM inventory will no longer receive and be required to sign “zero-inventories” for unsealed RAM. If no unsealed RAM is in possession, the AU must still submit an initial zero unsealed RAM inventory, but is not required to submit subsequent periodic zero unsealed RAM inventories.
 Ensuring radioactive material (RAM) security continues to be a significant concern. Always be aware of who is in your laboratory and confront any unfamiliar individuals. Keep RAM locked up or under direct observation at all times to prevent an unauthorized person from removing the RAM or gaining access to the RAM. The last person leaving a RAM-use laboratory should ensure the door to the laboratory is either locked or all of the RAM inside the room, including waste, is locked up.

**RSOF USEFUL LINKS**

Isotope Factsheet Link: http://researchcompliance.uc.edu/RadSafety/Isotope.aspx
Newsletters: http://researchcompliance.uc.edu/RadSafety/Newsletters.aspx

**RSOF STAFF**

Dramane Konate, Radiation Safety Officer
Beth Boston, Radiation Safety Specialist
Jason Collier, Radiation Safety Specialist
Dave Root, Senior Health Physics Technician
Mark Powers, Senior Health Physics Technician
Dave Kobza, Senior Health Physics Technician
Dick Henderer, Staff Health Physics Technician
Janine Sumrall, Staff Health Physics Technician
Debbie Kirkpatrick, Program Manager

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**RAM SECURITY**

We are on the web: www.uc.edu/radsafety
Phone: 513-558-4110
Fax: 513-558-9905

Radiation Safety Office
University of Cincinnati
170 Panzeca Way
P.O. Box 670591