Policy Concern: This policy clarifies the responsibilities of authorized users (AU) and other supervisors in ensuring selected classifications of radiation workers obtain initial training and attend retraining as required by regulation and/or license condition. This policy clarifies the fundamental procedures used by the Radiation Safety Office (RSO) for scheduling training courses for radiation workers and reminding AUs and/or supervisors when a radiation worker needs to attend retraining. This specific policy applies to radioactive material (RAM) Radiation Workers.

Policy Implementation: The Radiation Safety Officer (RSO) is directed to implement this policy upon approval by the Radiation Safety Committee (RSC) and to use this policy as guidance when implementing training requirements listed in the Radiation Control and Safety Program (RCSP).

Discussion: RAM Radiation Workers are individuals who may handle radioactive material under the RCSP. Under the RCSP, RAM Radiation Workers must complete the initial RAM radiation safety training process prior to handling RAM. Each calendar year RAM Radiation Workers are required to attend an initial training course or a retraining course. These training requirements are a condition of the University of Cincinnati medical broad scope license.

In 2004 the RSC approved RSC Policy 04-1 to cover initial and retraining requirements for RAM radiation worker and Health Care radiation workers. The RSC approved the policy May 19, 2004. In August 2005, the Ohio Department of Health enacted revised regulations. The revised regulations included new training requirements for Health Care radiation workers and a subgroup of RAM radiation workers, HDR users. Therefore, the initial policy was split into three policies RSC Policy 04-1A, RSC Policy 04-1B and RSC Policy 04-1C. RSC Policy 04-1A applies to RAM radiation workers. RSC Policy 04-1B applies to Health Care radiation workers. RSC Policy 04-1C applies to HDR users.

Policy Definitions

- **Annual:** Once per year, at about the same time each year, plus or minus one month.
- **Calendar year:** January 1 through December 31.
- **Health Care Radiation Worker:** An individual who provides physical care to a patient under radiation precautions.
- **HDR User:** A RAM Radiation Worker who has obtained the permission and additional training to operate a high dose rate remote afterloader (HDR).
- **Irradiator User:** A RAM Radiation Worker who has obtained the permission and additional training, along with meeting the security criteria for irradiator operation.
**RAM Radiation Worker:** An individual who handles radioactive material or radioactive waste, or performs surveys to detect radioactive contamination under the University of Cincinnati RCSP.

**Supervisor:** For RAM radiation workers the supervisor is any AU under whose authorization the individual is listed as a RAM radiation worker.

**Initial training:** For RAM Radiation Workers, the combination of the Basic Course and the Advanced Course presented by the RSOf and laboratory specific training provided by the AU.

**Retraining:** For RAM Radiation Workers, Any RSO approved RAM radiation worker retraining course.

**Policy Statement – RAM Radiation Workers**

1. All potential **RAM Radiation Workers** shall attend an *initial training* (i.e., RSOf provided Basic and Advanced Course sequence, and AU provided laboratory specific training) prior to performing any duties of a **RAM Radiation Worker**.

2. To maintain **RAM Radiation Worker** status an individual shall attend an *initial training* or an appropriate *retraining* course each calendar year.
   a. The **RAM Radiation Worker** status of individuals who have not met their calendar year training obligation by December 31 shall be suspended effective January 1 of the following year. (e.g., individual who did not attend an *initial training* or a *retraining* course in calendar year 2004 by December 31, 2004, suspension will be effective January 1, 2005)
      i. The RSO shall notify individuals of their suspended **RAM Radiation Worker** status. Notification shall be by memorandum sent via campus mail the first week of January.
      ii. The RSO shall notify **Supervisors** (i.e., AUs) of an individual’s suspended **RAM Radiation Worker** status. Notification shall be by copy of the memorandum to the **RAM Radiation Worker** and sent via campus mail the first week of January.
      iii. For **RAM Radiation Workers** who are also an AU, their radioactive material authorization(s) approval to order radioactive material will also be suspended. The notification issued by the RSO will include this additional action.
   b. Individuals who did not meet their calendar year training obligation by December 31 and who attend an *initial training* or a *retraining* course during the next calendar year shall have the course applied to the previous calendar year’s training obligation and the training date shall be entered into the RSOf database as December 31 of the previous year. (e.g., An individual did not meet their retraining obligation in 2004. They attend a retraining course on January 23, 2005. The retraining course shall be applied to their 2004 retraining obligation and the date of “attendance” shall be entered into the RSOf database as December 31, 2004.)
      i. This requirement shall only apply to the first applicable course attended during a calendar year.
      ii. This requirement shall only apply until such time as the RSC deactivates the individual’s **RAM Radiation Worker** status (see c. below).
      iii. The individual shall be required to attend a second course during the calendar year to meet that year’s retraining obligation. (e.g., the individual in the example above will have to attend a second training course in 2005 to meet the 2005 training obligation.)
c. Individuals who have not met their previous calendar year’s training obligation by the first RSC meeting of the calendar year shall have their RAM Radiation Worker status deactivated.

i. The RSC Chair shall notify individuals of their deactivated RAM Radiation Worker status. Notification shall be by memorandum sent via campus mail within one week of the RSC meeting.

ii. The RSC Chair shall notify Supervisors (i.e., AUs) of an individual’s deactivated RAM Radiation Worker status. Notification shall be by copy of the memorandum to the RAM Radiation Worker and sent via campus mail within one week of the RSC meeting.

iii. The RSC shall instruct the RSO to cancel the RAM Radiation Worker status and any dosimeters for individuals who had their RAM Radiation Worker status deactivated by the RSC. Cancellation shall be processed by the RSO within one week of the RSC meeting. Dosimeter cancellations shall be effective as soon as possible according to the dosimeter vendor’s deletion practices.

1. If the individual is also classified as an Irradiator User or HDR User (subgroups requiring active RAM Radiation Worker status), the RSC instruction to delete the RAM Radiation Worker status shall be deemed as including deletion of the user classification(s).

2. If the individual is also an AU:
   a. The RSC shall also instruct the RSO to deactivate all of the individual’s radioactive material authorizations.
   b. Because of the effect on other individuals and additional complexity involved with deactivation of an AU, the RSC may delay deactivation of RAM Radiation Worker status and the AU/authorization(s) until the day following the next RSO scheduled retraining course.

(3) Prior to reinstatement of RAM Radiation Worker status an individual must bring their training status up-to-date.

a. Individuals who last attended an appropriate initial training or retraining course three years ago or less may bring their training status up-to-date by attending the Advanced Course portion of the initial training or a retraining course. (Three years or less is based on exact calendar date of last course taken and date of reinstatement course to be attended.)

b. Individuals who last attended an appropriate initial training or retraining course over three years ago must bring their training status up-to-date by attending the Advanced Course portion of the initial training.

c. Individuals who had their RAM Radiation Worker status deactivated by the RSC must bring their training status up-to-date by attending the Advanced Course portion of the initial training.

(4) Scheduling of radiation safety training courses:

a. No later than December 15 of each year the RSO shall publish a course schedule for the next calendar year.
   i. A copy of the published course schedule shall be sent via campus mail to all applicable Supervisors (i.e., AUs) by December 15.
   ii. The course schedule shall be posted on the RSO website by December 31.
   iii. The course schedule shall include the following:
1. Basic course (an initial training course)
2. Advanced course (an initial training course)
3. Retraining courses applicable for RAM Radiation Workers

iv. The schedule shall be based on past years’ experience of attendance and shall ensure:
   1. The Basic course is presented at least monthly.
   2. The Advanced course is presented at least monthly.
   3. A retraining course for RAM Radiation Workers is presented at least monthly.

v. The RSOf is not obligated to present any training course listed in the published schedule for which there are no attendees scheduled 24 hours before the start time of the course or no attendees have arrived within 10 minutes after the start time of the course.

b. Upon approval of the RSO, the RSOf may provide special presentations of established courses (i.e., initial training and retraining courses listed on the published course schedule). Except for the following, it is the RSO’s discretion whether a requested special presentation will be accepted.

i. The RSO shall grant approval to special presentation requests for established courses (i.e., courses that are included in the published course schedule) if:
   1. Made at least two weeks in advance of desired presentation date and time.
   2. The desired presentation date and time fits within the work schedule and is during the normal work hours of the individual, who based on the current RSOf work assignments, would perform the presentation. (and)
   3. The number of attendees is confirmed by the requesting Supervisor (i.e., AU) to be 6 or more.

ii. The RSO shall grant approval to special presentation requests for non-routine retraining courses (i.e., courses that are not included in the published course schedule and/or require syllabus development) if:
   1. Made at least six weeks in advance of desired presentation date and time.
   2. The course subject is within the scope of the license requirements for retraining.
   3. The course presentation is approximately one hour.
   4. The desired presentation date and time fits within the work schedule and is during the normal work hours of the individual, who based on the current RSOf work assignments, would perform the presentation. (and)
   5. The number of attendees is confirmed by the requesting Supervisor (i.e., AU) to be 6 or more.

iii. The RSO shall disapprove any requests where:
   1. Past experience of the RSOf indicates the Supervisor (i.e., AU) has multiple times not met past special presentation commitments (e.g., the Supervisor has scheduled course for 6 attendees and only 5 or less attended).
   2. The Supervisor (i.e., AU) request does not meet the standard special presentation requirements.
   3. The Supervisor (i.e., AU) does not provide adequate justification, in the opinion of the RSO, that a special presentation is warranted.

c. As directed by the RSC as part of disciplinary action, the RSOf shall present special training courses. For RSC directed courses the RSC shall ensure the special course presentation request meets the standard special presentation guidelines noted above or
ensures, as determined by the RSO, the presentation does not interfere with the RSO's carrying out their normal duties.

(5) Retraining reminders
a. Each July the RSO shall provide Supervisors (i.e., AUs) with a report listing all individuals currently under their supervision and any radiation safety courses the individuals have attended.
b. Monthly from September through December, the RSO shall send via campus mail to each applicable Supervisor (i.e., AU) a list of individuals under their supervision who have not yet met their calendar year training obligation.
   i. In September and December duplicates of RAM radiation worker lists shall be copied to the applicable Department Head.

(6) Supervisor (i.e., AU) responsibilities include, but are not limited to:
a. Ensuring each potential RAM Radiation Worker obtains required initial training prior to performing any activity requiring the training.
b. Ensuring each potential RAM Radiation Worker properly completes and submits a current Radiation Worker/Dosimetry Application (RS Form 2.0) to the RSO. The RS Form 2.0 submitted must include the Supervisor’s (i.e., AU) signature.
c. Ensuring each approved RAM Radiation Worker attends appropriate retraining courses, as needed.
d. Ensuring each RAM Radiation Worker schedules attendance at an initial training or retraining course at least 24 hours prior to the scheduled course time.
e. Notifying the RSO when an individual should no longer be considered a RAM Radiation Worker under the Supervisor (i.e., AU). (This notification may be via email to the RSO or submission of RS Form 2.0.)

(7) Special requirements:
a. Individuals must not be late for courses. Individuals who arrive more than 10 minutes after a course’s start time will not be considered as attending the course.
b. Basic Course
   i. Potential RAM radiation workers have the option to attend the Basic Course or to pass out of the Basic Course by taking a Challenge Test.
   ii. Challenge Test:
      1. Individuals must receive a score of 85% or higher on the Challenge Test to “pass out” of the Basic Course.
      2. Individuals who attempt to pass out of the Basic Course by taking the Challenge Test may only take the Challenge Test once. Anyone who fails the Challenge Test must attend the Basic Course to obtain RAM radiation worker status.
      3. Challenge Tests may be taken on a walk-in basis at the RSO between 8:00 AM and 4:00 PM, standard RSO business days.
   iii. Course Exam:
      1. The passing score for exams given during the Basic Course course is 70%.
      2. Individuals who fail an exam given during the Basic Course shall be required to either:
         a. Retake the Basic Course, or
         b. Schedule a meeting with the trainer or an RSO staff member approved by the RSO for one-on-one remediation.
c. Individuals who complete one-on-one remediation shall be assigned the minimum passing score of 70%.

Approval
Initial policy 04-1 approved by Radiation Safety Committee May 19, 2004
Revision approved May 17, 2006