

Simmons UNIVERSITY

RADIATION SAFETY PROGRAM

INTRODUCTION

Some of the overall goals of the radiation safety program are:

- Protecting the general public and environment from unnecessary exposure to radiation
- Proper training and instruction to designated faculty and students includes:
 - The As Low As Reasonably Achievable (ALARA) program and personnel radiation monitoring
 - Knowledge of emergency procedures and radiation detection equipment
 - Inventory and disposal recordkeeping
 - Self-reporting, corrections and enforcement of the program
 - Annual Audits and inspections

I, Jane Lopilato, have been designated as the Radiation Safety Officer (RSO) on the Radioactive Material License. Massachusetts Department of Public Health has an agreement with the Nuclear Regulatory Commission to oversee radioactive material program in Massachusetts. I will carry out the duties and enforce the conditions of the license including:

- Annual Audit - I, along with senior management or a representative assigned by senior management, will annually conduct an audit of the radiation safety program, as well as checking, reviewing and correcting any deficiencies. All copies of audits will be retained.
- Organization & Scope of Program - I will ensure that the original conditions and information on the license stays current.

As of December 2016, tritium is the only radioactive material being used at Simmons University (Simmons).

RSO RESPONSIBILITIES

If the RSO observes an activity not in compliance with this program, I will stop the activity.

I will review the license and renew, as necessary.

I will make sure all designated faculty and students are thoroughly trained. A log is maintained to record this radiation safety training.

I will monitor areas where radioactive materials are used by conducting wipe tests per Simmons' radioactive materials license.

I will have contact information on hand for proper authorities (e.g., licensing agency) in case of accident, damage, fire or theft.

I will keep the license up-to-date; check the expiration date, request renewals and amendments in a timely manner.

I will give advance notice of desire to terminate the license.

STUDENT RESPONSIBILITIES

Students are responsible:

- Attending the appropriate radiation safety training prior to using radioactive material.
- Working under the supervision of the RSO or a designated faculty member at all times.
- Reporting any concerns to the RSO and the designated faculty member, as soon as possible.

TRAINING FOR DESIGNATED FACULTY AND STUDENTS

Training will consist of:

- Exposure issues and ALARA
- Required safety procedures
- Emergency response procedures

Designated students are trained as needed per semester including summer. Designated faculty members are trained by the RSO.

RADIATION SURVEY INSTRUMENTS

Simmons owns a radiation survey meter, which detects the radioactive materials used and stored at Simmons. The meter will be calibrated annually. I will keep survey meter calibration records on file.

PERSONNEL RADIATION PROTECTION

Based on a risk assessment performed by the RSO, it was determined that personnel radiation protection is not required for the radioactive materials being used at Simmons and that dosimetry is not required at Simmons. On an annual basis, the RSO will re-assess to confirm that additional personnel radiation protection is required.

I understand that the key component of a sound Radiation Protection Program is a solid adherence to ALARA considerations. I will make sure that ALARA considerations (time, distance & shielding) are being taught and practiced and incorporated into the Radiation Protection Program.

I will make sure that if a designated faculty member or designated student declared her pregnancy she was limited to a maximum of 500 millirems for the term of the pregnancy.

PUBLIC DOSE

I will take steps to protect all Simmons employees, Simmons students, and contractors from exposure to radiation.

I will conduct a survey or evaluation of storage and use areas to ensure that exposure levels are below the limits outlined in Simmons' radioactive material license.

I will monitor the storage area, security or use of the surrounding areas that would necessitate a new survey or evaluation.

I will keep storage survey and evaluation records on file.

OPERATING & EMERGENCY PROCEDURES

I will develop, implement and maintain Simmons' Operating & Emergency Procedures, which are posted at the radioactive material storage and use areas. I review these procedures with all designated faculty and designated students as part of the training.

Procedures include:

- Keeping exposures ALARA
- Constant accountability during use

I will make sure the above required elements, as specified by the Massachusetts Department Public Health, are part of the procedures.

I have provided Simmons' Public Safety with my contact information (office phone number, cell phone number). Public Safety has been instructed to contact me if there are any concerns about the radioactive materials at Simmons.

ORDERING AND RECEIVING RADIOACTIVE MATERIALS

I am responsible for ordering radioactive materials for Simmons. No one else is permitted to order radioactive materials.

I will notify Shipping and Receiving the day before delivery of radioactive materials. Upon receipt, I will scan the package as a precaution and conduct a wipe test on the package and its contents. If contaminated is detected, the manufacturer and Shipping and Receiving are notified immediately.

MAINTENANCE OF SCINTILLATION COUNTER

I will make sure the scintillation counter used for detecting and measuring radiation is calibrated in accordance with the manufacturer's recommendations, in addition to, routine maintenance and service.

TRANSPORTATION

Radioactive materials are not transported outside the designated storage and use areas.

NOTIFICATION & REPORTS

I will assure that required notifications of incidents are made to the Massachusetts Department Public Health in accordance with Simmons' radioactive material license. This does not include non-emergency oversights that must be noted and corrected in your Radiation Safety Program.

POSTING & LABELING

I will post or make available certain documents and/or posters for public viewing.

I will make sure I am familiar with the Massachusetts Department of Public Health requirements.

I will post the "Notice to Employees" poster in an area accessible to all employees.

I will post all regulations and license documents or post a notice as to where these documents can be viewed (post copies in a publicly viewable area).

I will be aware and post any documents required by the Massachusetts Department Public Health.

RECORDKEEPING FOR DECOMMISSIONING

I will be aware that the Massachusetts Department Public Health requires notice before terminating the license and transferring or disposing of radioactive materials.

I will be aware of requirements and maintain all decommissioning, transfer and disposal documents. A contractor may be hired to assist with this process.

I will maintain records important for decommissioning.

BULLETINS & INFORMATION NOTICES

I am part of the Massachusetts Department of Public Health notification system for radioactive materials licensees.

I will make sure that appropriate training and actions are taken in response to these notices.

DEFICIENCIES IDENTIFIED IN AUDIT AND CORRECTIVE ACTIONS PLANNED

If I discover any deficiencies or oversights during the year I will investigate, report, summarize and take corrective actions to rectify the issue. I will document the corrective actions. I will make sure that corrective actions will be taken at all licensed facilities. I will likewise provide any recommendations for improvements.

EVALUATION OF OTHER FACTORS

I will ensure that senior management is constructively involved and informed about the radiation safety program. Senior management will support the RSO, as needed.

SIGNATURES

By signing below, Senior Management and the RSO are committed to Simmons' Radiation Safety Program and complying with Simmons' Radioactive Material license issued by the Massachusetts Department Public Health.

| Title | Print Name | Signature | Date |
|--------------|-------------------|------------------|-------------|
| RSO | | | |
| President | | | |