



Radiation Safety Manual

Revised August 2020

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ALARA PROGRAM

The following conditions describe the program followed by Ms. Melissa Whitley, Radiation Safety Officer, to ensure that occupational radiation exposures to faculty, staff, and students engaged in the use of radioactive equipment are kept As Low As Reasonably Achievable.

I. Management Commitment

Ms. Melissa Whitley, Radiation Safety Officer, is committed to make every reasonable effort to minimize radiation exposures to faculty, staff, and students, through the following control measures:

- The campus's radiation safety officer will make personnel aware of the LSU System Radiation Safety Committee's commitment to maintain low exposure levels.
- The LSU System Radiation Safety Committee will periodically review operating procedures with the Radiation Safety Officer to determine steps taken to reduce exposures.
- The LSU System Radiation Safety Committee will ensure that the person, or persons, selected for the Radiation Safety Officer responsibilities are fully qualified to administer all aspects of a radiation protection program.
- The LSU System Radiation Safety Committee will ensure that all faculty, staff, and students engaged in the use of radioactive equipment are fully educated in the area of radiation safety. This will be reviewed at least once every three years, and additional education will be scheduled as necessary.
- The RSO has full authority to enforce safe operation, and to communicate as required with the LSU System Radiation Safety Committee to halt an operation that he or she deems unsafe.

II. Vigilance by the RSO and Radiation Protection Staff

The RSO has the responsibility to monitor the Radiation Safety Program to ensure that exposures are as low as reasonably achievable, and to search for new and better ways to perform jobs with less exposure. The following aspects apply to this responsibility:

- The RSO shall know the origins of radiation exposure and be aware of trends in exposures.
- Should unusual exposures occur; the RSO shall initiate an investigation of the circumstances to determine causes and prevent the likelihood of reoccurrence. Operating procedures should periodically be reviewed to identify situations in which exposures can be reduced.
- The RSO shall be responsible for ensuring that the equipment used on campus is maintained in good working order and used properly. Written procedures for use of the equipment are to be available and followed.

Melissa Whitley, M.S.R.S., R.T.(R)
Radiation Safety Officer
Louisiana State University, Alexandria

Emergency Notice

Despite the strict adherence to all laboratory safety rules, it is possible that accidents involving radioactive material will occur on occasion. For this reason, it is important that radioactive material users are aware of the proper procedures to follow for various types of accidents.

Minor Spills:

Incidents that involve the release or spillage of less than 100 microcuries of a radionuclide in a nonvolatile form can generally be regarded as minor. In such cases:

1. Notify all other persons in the room at once.
2. Clear the room of all persons except those needed to deal with the spill.
3. Confine the spill immediately.
 - Liquids: Drop absorbent paper or chemical (e.g. calcium bentonite) on the spill. The standard "Spill Controls Kits" are available from Chemistry Stores.
 - Solids: Dampen thoroughly, taking care not to spread contaminants; otherwise use oil.
4. Notify the laboratory supervisor.
5. Notify the Radiation Safety Officer:
 - Melissa Whitley, 427-4423
 - After hours, notify University Police, 473-6427
 - 709-0545 (cell phone-University Police)

Major Spills or Releases:

An incident that occurs outside of a fume hood and involves the release of more than 100 microcuries of a radionuclide in a nonvolatile form, or the release of any amount of a radionuclide in a volatile form, should be considered "major." In such cases:

1. Evacuate the room immediately, shutting doors and windows on the way out.
2. Notify the laboratory supervisor.
3. Notify the Radiation Safety Officer:
 - Melissa Whitley, 427-4423.
 - After hours, notify University Police, 473-6427
 - 709-0545 (cell phone-University Police)
4. Post the laboratory door with a "Keep Out" sign.
5. Assemble those persons who were present in the laboratory far enough away to assure everyone's safety.
6. Wait for assistance.

Accidents Involving Personal Injury:

For any accident involving personal injury, medical treatment or assistance will always be the first priority. This may involve administering first aid and/or calling "0" or Extension 5500 to notify for emergency medical assistance. Inform the police of the potential for radioactive contamination. For accidents involving radioactive materials, contamination control and exposure control are important but should never delay or impede medical assistance. If radioactive materials are involved, emergency personnel should be notified before treatment takes place, so they can take appropriate action to protect them as well as prevent the spread of contamination. Both the Radiation Safety Officer (Melissa Whitley, 427-4423) and the Director of Utility Plant (473-6476 or 709-0554) must also be notified as soon as possible. After the injured person is treated and removed from the accident site, the previously described procedures should be followed as appropriate.

Personal Contamination:

In the event of any personal contamination:

1. Notify the Radiation Safety Officer (Melissa Whitley, 427-4423) immediately.
2. Remove all contaminated laboratory personal protective clothing (lab coat, gloves, etc.)
3. If possible, wash contaminated area with mild soap and water.
4. Monitor the contaminated area.
5. Repeat washing, as necessary.

Decontamination Procedure:

In the event that surfaces or equipment within the laboratory are suspected or determined to be contaminated with radioactive material, the radionuclide user must initiate and complete appropriate decontamination procedure. For most relatively minor contamination incidents, the following general steps should be taken upon discovery of the contamination:

1. Mark the perimeter of the contaminated area.
2. Notify the Radiation Safety Officer (Melissa Whitley, 427-4423) and the Director of Utility Plant (473-6476 or 709-0554) of the contamination so that their staff can more accurately assess the extent of the contamination and advise and assist in the decontamination effort.
3. Assemble cleaning supplies such as paper towels, detergent in water, plastic bags and plastic gloves.
4. Proceed with scrubbing the area from the borders to the center, cleaning small areas at a time.
5. Periodically monitor the effectiveness of the decontamination effort with surface wipes and instrument surveys.
6. Place all contaminated cleaning materials such as paper towels, rags, and gloves in a plastic bag and label as radioactive waste.
7. Notify the Radiation Safety Officer and the Director of Utility Plant upon completion of the decontamination effort so that a follow-up contamination survey can be made.

If you want additional information on any these procedures, please contact the Radiation Safety Officer at extension 4423.

Duties of the Radiation Safety Officer

1. Assure that radioactive materials possessed under the license conform to the materials listed on the license.
2. Assure that only individuals authorized by the license use licensed radioactive materials.
3. Assure that all authorized users were required personnel monitoring equipment, such as film badges or TLDs.
4. Review all personnel monitoring reports:
 - Alert the radiation worker (faculty, staff, or student) if there is a high or unusual exposure.
 - Notify the LSU System Radiation Safety Committee as required if there is a high or unusual exposure. Investigate all unusual exposures.
 - Take corrective action to prevent other high or unusual exposures.
5. Assure that licensed radioactive materials are properly secured against unauthorized removal at all times when they are not in use.
6. Serve as a point of contact between radiation workers (faculty, staff, and students) and the LSU System Radiation Safety Committee.
 - Give assistance in case of an emergency
 - Notify proper authorities in case of accident or damage to equipment or personnel
7. Assure that the terms and conditions of the license are met.
 - Perform periodic leak tests of sealed sources with the appropriate faculty of the Department of Allied Health.
 - Review records periodically to assure compliance with PM-30 of the Louisiana State University System.

RADIOLOGIC TECHNOLOGY PROGRAM

Radiation Protection Policy

Students will be expected to practice proper radiation safety procedures at all times when present in clinical assignments and in laboratory activities. These practices must assure radiation exposures are kept as low as reasonably achievable (ALARA). **Under no circumstances are students allowed to hold an image receptor (IR) during any radiographic procedure.** Students should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.

Radiation badges are used for monitoring students' radiation dose. Each student will be issued an Optically Stimulated Luminescence (OSL) dosimeter before the start of the first clinical rotation. The dosimeter will be exchanged every quarter during the first and second week of that month. Dosimeter reports will be available to students within thirty (30) school days following receipt of data. Students will always wear a dosimeter while attending clinical assignments and energized laboratory sessions; **the student is not allowed to attend without their dosimeter.** If a student arrives without a dosimeter, the student will be sent home to retrieve the dosimeter and considered tardy. The dosimeter is the responsibility of the student.

Declared pregnant students will have collar and fetal badges assigned for more thorough monitoring. All radiation monitoring records are kept on file in the RSO's office.

The Radiation Safety Officer (RSO) will evaluate each report thoroughly. Any elevated exposure will be investigated for cause and necessary corrective measures taken when applicable. The occupational dose equivalent limits for adults are:

1. Annual Limit:
 - a. Total effective dose equivalent is .05 Sv (5 rem).
 - b. The sum of the deep dose equivalent and the committed doses equivalent to any individual organ or tissue other than the lens of the eye is .5 Sv (50 rem).
1. Annual Limit to the lens of the eye, skin, and extremities:
 - c. Eye dose equivalent of .15 Sv (15 rem)
 - d. Shallow dose equivalent of .5 Sv (50 rem) to the skin or any extremity.

A Student Exposure Report (see below) will be completed by the RSO on any student who receives more than 2.5 mSv (250 mrem) in one calendar quarter. Students should not receive more than 10 mSv (1000 mrem) in one year. Students must employ safe radiation protection techniques for the patient, self, and other during radiographic exposures.

All students are expected to:

- Wear a dosimeter attached to the collar of the uniform when in clinic or the energized laboratory; if wearing a lead apron, the student should wear the badge outside of the apron. The badge must face forward to obtain an accurate radiation measurement.
- Prevent dosimeter from exposure to heat, moisture, washing machines, dryers, microwave ovens, and color televisions;
- Prevent dosimeter from receiving excessive exposure from radiation when not worn;

- In the event a dosimeter is lost or destroyed, it is the student's responsibility to inform the RSO immediately so that a replacement dosimeter can be obtained.

Students have potential access to the magnetic resonance environment. The MRI system has a very strong magnetic field that may be hazardous to individuals entering the MRI environment if they have certain metallic, electronic, magnetic, or mechanical implants, devices, or objects. To assure students potentially entering the MRI environment are safe, an appropriate "MRI Safety" training will be required. All students are required to complete the MRI Screening Form (see Appendix I) to assure students are appropriately screened for magnetic wave or radiofrequency hazards. Additionally, students will be directly supervised at all times by the MRI technologist during their rotation in the MRI suites.

LOUISIANA STATE UNIVERSITY ALEXANDRIA

DEPARTMENT OF ALLIED HEALTH

RADIOLOGIC TECHNOLOGY PROGRAM

STUDENT EXPOSURE REPORT FORM

Student's Name _____

Date of Birth _____

Date OSL Read _____

OSL Reading _____

The above reading exceeds the recommended dose equivalence for one calendar quarter set forth in the Student Clinical Handbook under the Radiation Protection Policy, and by the LSU System Radiation Safety Committee.

The object of our ALARA program is to maintain radiation exposure at the lowest possible levels. This program is based on the premise that radiation exposure is not risk free and therefore, should be kept to levels well below the limits allowed by the Nuclear Regulatory Commission, the State of Louisiana, and other regulatory agencies. The state dose equivalent limit for an occupational radiographer is .05 Sv/yr. For students participating in clinical experiences of a radiography program, the administrative dose equivalent limit is

10 mSv/yr. Therefore, investigational action levels set by the Radiologic Technology Program at LSU Alexandria are as follows:

A student who receives more than 2.5 mSv/calendar quarter.

Your dose is below the NRC and State limits but exceeds the limit recommended for student clinical education. This behavior indicates a need to review radiographic procedures performed during a specific assignment in order to reduce your exposure. Apply the basic rules of radiation protection (time, distance, and shielding) to lower your radiation exposure.

Please provide in the space below a written explanation as to why you believe your OSL has a high reading. Please be specific.

Student Signature Date

RSO Signature Date

RADIOLOGIC TECHNOLOGY PROGRAM

Pregnancy Policy

A female student is given the option of whether or not to inform program officials of her pregnancy. If the student chooses to **voluntarily** inform the program director of her pregnancy, it must be in writing (see below). In the absence of this voluntary written disclosure, a student cannot be considered pregnant. However, because of the sensitivity of the unborn child to radiation, it is necessary to inform female applicants of the possible health risks involved as a result of occupational exposure during pregnancy. Students also have the option of continuance in the program with or without modification or take a leave of absence from the program.

1. Pregnant students should notify the PD, Clinical Instructor, and the Radiation Safety Officer (RSO) as soon as pregnancy is suspected/determined so that appropriate radiation safety measures can be instituted. Even though this written notification is voluntary, the Department of Allied Health encourages the pregnant student to perform this disclosure.

1.1 If the student chooses to voluntarily inform officials of her pregnancy, a physician statement verifying the pregnancy shall be submitted by the student. This statement must include a medical release which allows the student to continue with clinical assignments. If, for medical or personal reasons, the student is unable to complete the clinical assignments, she may initiate a request for authorization of an “I” (incomplete) grade through the office of the Vice Chancellor for Academic Affairs. The student must subsequently remove the “I” grade following the regulations in the University catalog. Should the student choose to withdraw from a clinical course, the “withdrawal” guidelines in the University catalog must be followed. Should the student choose to resign from the program, the “resignation” guidelines in the University catalog must be followed.

2. Upon verification of pregnancy, the PD will review all appropriate and applicable principles of proper radiation safety with the student.

2.1 Notify all appropriate radiology department personnel of the expectant status of the student in order to insure proper clinical education experience while maintaining the standards of radiation safety.

2.2 Changes in the clinical assignments may be instituted at the request of the student in order to insure compliance with the recommended Effective Dose Equivalent standards upon completion of the declared pregnancy form.

2.3 The student will be given the option to continue in the program with OR without any modification to clinical assignments.

3. Following completion of the declared pregnancy form, the Effective Dose Equivalent to the fetus from occupational exposure of the expectant mother should not exceed 5 mSv during the remaining gestation period. The monthly exposure shall not exceed 0.5 mSv. The student will be furnished with an OSL fetal radiation monitoring device. This device must be worn at waist level at all times and underneath the protective lead apron during fluoroscopy.

4. If the pregnancy occurs during the first semester of the program and the student is unable to fulfill the required clinical objectives, the student will withdraw from the program and may reapply the following spring semester. If pregnancy occurs after the completion of the first semester and the student is unable to fulfill the required clinical objectives, the student may request authorization for an “I” grade through the Vice Chancellor

for Academic and Student Affairs for the clinical course. The student may either withdraw or re-enter the same semester of the following year if guidelines for the removal of the “I” grade have been followed and a letter of intent to re-enter the program is turned in to the Program Director no later than 3 weeks prior to the start of the semester.

5. The Declaration of Pregnancy may be withdrawn at any time by the student.

LOUISIANA STATE UNIVERSITY ALEXANDRIA
DEPARTMENT OF ALLIED HEALTH
RADIOLOGIC TECHNOLOGY PROGRAM

DECLARED PREGNANCY FORM

At the date of my signature, I _____, am declaring myself pregnant and understand that my radiation limit is 5 mSv for the remainder of my gestation period, not to exceed 0.5 mSv in any given month. Also, changes in my clinical assignments **may be** instituted in order to ensure compliance with JRCERT Standards.

Student's Signature _____ Date _____

Physician _____ Approximate Date of Delivery _____

At the date of my signature, I hereby release above student to continue with clinical assignment.

Physician's Signature _____ Date _____

Program Director's Signature _____ Date _____

At the date of my signature, I _____, chose to withdraw my declaration of pregnancy.

Student's Signature _____ Date _____

Program Director's Signature _____ Date _____

ATTENTION

PROGRAM FACULTY AND STUDENTS

It is the responsibility of all students to abide by the Radiation Safety Rules, basic operations, and operator methods set forth by the Radiologic Technology Program. Any misuse of equipment or deliberate failure to follow these rules will result in disciplinary action. The ALARA Plan, the laboratory safety rules, basic laboratory operations, and operator methods are kept in a binder labeled, "Radiation Safety Manual" located in Rm 1142 in the Radiology Department at England Airpark Facility.

Material Safety Data Sheets (MSDS) for processing chemicals, radiation protection, and lab equipment are kept in a binder labeled, "MSDS" in the Allied Health Education Building located at 807 Jackson Street, Alexandria, LA.

In case of an emergency, refer to the "LSUA Emergency First Aid Response Procedures" posted on the wall in the Allied Health Education Building located at 807 Jackson Street, Alexandria, LA.

1/05

Emergency Procedures

Campus emergencies, defined as unexpected, serious occurrences resulting in injury or illness, and requiring immediate attention, are handled by an Emergency Response Team. Appointed by the Chancellor and chaired by a designated “Emergency Response Person-in-Charge,” the team includes members of the administration, faculty, and staff. To ensure that experienced people are on the team at all times, members are appointed to rotating terms. The university’s general procedures for emergencies are presented here:

1. A room for campus medical emergencies is located in F. Hugh Coughlin Hall (Nursing Education Building). Access to this room is controlled by the members of the Emergency Response Team.
2. In the event of an emergency, 911 should be called. The “Emergency Response Person-in- Charge” or, in his/her absence, a member of the Emergency Response Team, should also be called to the scene. To do so, call Extension 5555, 6427, or 473-6427 from an outside line. After 4:30 p.m. call University Police (Extension 6427 or 5555) or 473-6427. If you cannot reach them, dial 9 (for an off-campus line) and 911. The 911 operator will contact University Police on your behalf.
3. Following any emergency, a report should be immediately submitted to Mr. Daniel Manuel, Coordinator of Title IV, Disability Services, and Safety and Risk Management, who will then be responsible for contacting family members and completing the report for filing and future reference.
4. Students experiencing a non-emergency sickness or illness may contact the LSUA Health Center for consultation (318) 427-0110.

RADIOLOGIC TECHNOLOGY PROGRAM

Energized X-Ray Lab Rules

The following rules will be strictly enforced by all LSUA faculty:

- At NO time shall any individual be exposed to the useful beam. Equipment is to be used solely for the purpose of x-raying the radiographic phantoms. Failure to comply with this rule WILL result in immediate dismissal from the program.
- At NO time shall a student make an exposure without the presence of a qualified instructor. All radiographic exposures must be part of a specific assignment and under the direct supervision of a faculty member.
- In the event of an emergency or malfunction involving the x-ray equipment, contact the program director immediately.
- All accidents must be reported to the supervising faculty member immediately and use of the equipment discontinued until the problem is corrected.
- NO person shall be admitted into the laboratory without his/her personnel monitoring device.
- Exposure of a personnel monitoring device to deceptively indicate a dose delivered to an individual is prohibited and may result in dismissal from the program.
- Visitors ARE NOT allowed in the X-ray Lab.
- Appropriate attire should be worn at all times during positioning labs.
- Eating, drinking, smoking and other forms of tobacco use are prohibited in the x-ray room.
- If students are using the laboratory at times other than scheduled class time:
 - Students must sign up for additional time utilizing sheets posted on door.
 - Upon leaving, students will ensure that the lab is clean by wiping down surfaces.
 - Upon leaving, students will ensure all equipment is properly stored and turned off.
- USE OF THE X-RAY LAB IS A PRIVILEGE. Upon entering, the student assumes responsibility for himself/herself and his/her equipment.
- The student may lose his/her right to use equipment in the X-ray lab and/or face disciplinary action resulting in reduction of course grade for any violation of these regulations

I. Basic Operation of Equipment

A. X-ray Unit Consoles in Energized Lab (AHEB Rm 217)

1. Turn on all line circuit breakers located on the wall in the control room.
2. Turn on the power switch in the control console.
3. Perform tube warm-up if unit has not been used for two hours. Be sure to close collimator.

4. Select technical factors as needed.
5. Avoid prolonged rotor activation (boost) prior to exposure.
6. Consult tube-rating charts prior to large exposures.
7. When use is completed, turn off power switches in reverse order.

B. Table and Tube Support in Energized Lab (AHEB Rm 217)

1. Move table, tube/tube stand only when proper locks are selected.
2. Insure that all stretchers, chairs, and stools are not obstruction the table or tube before moving.

C. Human Phantoms and Test Phantoms

1. When positioning human or test phantoms onto a wheelchair, gurney, or radiographic table, demonstrate lifting and transfer techniques using proper body mechanics.
2. The phantoms must be handled with the utmost care.
3. Never lift a PIXY phantom by the extremities.
4. Return all phantoms to the proper storage areas when finished.
5. The PIXY phantoms are kept on a gurney in the storage room.
6. Please refer to the INSTRUCTION MANUAL FOR PIXY WHOLE-BODY PHANTOM for further information regarding this matter.

D. Laboratory Accessories

1. Handle cassettes and QC instruments with the utmost care.
2. Return all items to proper storage areas after use.

II. Operator Protection

- A. The program director and faculty of radiologic technology are responsible for the supervision of all students enrolled in the program. The program director and faculty are responsible for personnel who enter the energized labs at all times.
 1. The OSL radiation monitoring device shall be worn during any operation of the energized unit.
 2. Close all doors to the energized lab before making any exposure.

3. Insure that there is no one in the lab during exposures unless behind the control panel.
 4. Observe low hanging and projecting equipment manipulating the unit.
 5. The lab shall be used only with permission of the radiography faculty.
 6. Students shall practice all standard radiation safety practices while operating the equipment.
 7. A professional demeanor shall be practiced at all times.
 8. A copy of the LSU System Radiation Protection Program (PM-30) regarding this matter is located in this manual.
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Louisiana State University System
3810 West Lakeshore Drive
Baton Rouge, Louisiana 70808

Office of the President

225 / 578-2111
225 / 578-5524 fax

Permanent Memorandum No. 30 (PM-30)

Effective July 1, 2014 (*This memorandum supersedes PM-30 dated 09/01/2010*)

F. King Alexander, President

A handwritten signature in cursive script that reads "F. King Alexander".

RADIATION PROTECTION PROGRAM

An LSU System Radiation Safety Committee is established to develop and implement a program to assure the proper and safe usage of radioisotopes and other sources of ionizing and non-ionizing radiation and radioactive materials within the LSU System in University research, instructional and service programs but excluding those medical units associated with the LSU Health Care Services Division and the LSU Health Sciences Center at Shreveport.

Non-ionizing radiation is defined as non-ionizing radiation produced as a result of equipment used at such a level that is recognized as harmful to humans. Non-ionizing radiation associated with welding, cutting and burning operations is excluded.

I. Committee Membership

Membership on the LSU System Radiation Safety Committee shall be as follows:

- a. the Coordinator of the LSU System Radiation Safety Program;
- b. the Secretary of the LSU System Radiation Safety Committee;
- c. the LSU System Radiation Safety Officer; and
- d. the Chair from each of the Campus Radiation Safety Committees, or the equivalent.

The President shall designate as Coordinator any member of the LSU System Faculty who is knowledgeable in the use of radiation and radioactive materials. The Coordinator shall serve as Chair of the LSU System Radiation Safety Committee. The Coordinator shall be administratively responsible for the radiation safety necessary in the use of ionizing and non-ionizing radiation and radioactive materials in LSU System research, instructional, and service programs. The Coordinator shall maintain surveillance of all properties owned or controlled by the LSU System, and all personnel on or about these properties, where there exists the possibility of occupational exposure to ionizing and non-ionizing radiation or radioactive materials. The term of appointment shall be indefinite.

The President shall designate a Vice-Chair from among the current members of the Committee, excluding the Coordinator, Secretary or System Radiation Safety Officer, and representing a campus other than that of the Coordinator. The Vice-Chair shall preside at Committee meetings when the Chair is unavailable. The Vice-Chair will serve as interim Coordinator if the Coordinator becomes unable to perform his or her duties for any reason, until such time as the President appoints a new Coordinator. The term of appointment shall be indefinite.

The President shall designate as Secretary any member of the LSU System Faculty who is knowledgeable in the use of ionizing and non-ionizing radiation and radioactive materials. In addition to keeping the minutes of Radiation Safety Committee meetings, the Secretary will be responsible for arranging the meetings, including the preparation and dissemination of agendas. The term of appointment shall be indefinite.

The Committee shall designate as LSU System Radiation Safety Officer any member of the LSU System Faculty or Staff who has the qualifications required to serve as Radiation Safety Officer for a broad scope radioactive material license. The LSU System Radiation Safety Officer is directly responsible for implementation and review of compliance with the regulations and policies established by the LSU System Coordinator and the LSU System Radiation Safety Committee. The LSU System Radiation Safety Officer is vested with the authority to act immediately in all matters pertaining to radiation safety involving LSU System personnel engaged in University-sponsored activities or any other personnel on University property. The Radiation Safety Officer's authority and actions, as defined in this memorandum, are subject to review by the LSU System Radiation Safety Committee. This assigned authority shall not relieve the individual from the normal review and authority of his/her departmental administration. The term of appointment shall be indefinite.

The individual Chancellors, with the approval of the Coordinator of the LSU System Radiation Safety Program, shall appoint a Campus Radiation Safety Officer(s) and a Campus Radiation Safety Committee(s) if nuclear materials or other sources of ionizing or non-ionizing radiation are in use on the campus. These individuals shall be selected from those faculty and staff members having knowledge and work experience in the areas of radiation and radioactive materials.

The Campus Radiation Safety Officers and Campus Radiation Safety Committees will be responsible to the LSU System Coordinator for the proper control and supervision of projects utilizing ionizing and non-ionizing radiation and/or radioactive materials on that campus. On campuses where the only sources of ionizing and non-ionizing radiation and radioactive materials consist of small teaching sources or those

in analytical instruments, the Chancellor is required to appoint only an individual responsible for radiation safety on the campus.

II. Committee Responsibilities

The LSU System Radiation Safety Committee shall have direct responsibility for (a) licensing of all matters requiring and/or affecting campus use of the LSU System's license or registration, and (b) supervision of the activities of each Campus Radiation Safety Committee and of the Campus Radiation Safety Officer on those campuses without a Committee. Also, the Committee shall have oversight authority for non-LSU organizations that (1) possess a valid license to use radioactive materials or are approved to use ionizing or non-ionizing radiation producing equipment and (2) operate in LSU facilities under administrative agreement with an LSU unit subject to this procedure. LSU-owned facilities leased to or used by third parties for the operation of a hospital or medical clinic pursuant to a Cooperative Endeavor Agreement with LSU, the State of Louisiana Division of Administration, and the Louisiana Department of Health and Hospitals are excluded from this oversight authority.

The Campus Radiation Safety Officer and/or the Campus Radiation Safety Committee on each campus must approve:

- a. K Personnel - all responsible persons desiring to use *licensed* radioactive materials or *registered/regulated* ionizing or non-ionizing radiation *sources*, including acceptable training or experience.
- b. K Procurement - all requisitions for *licensed* radioactive materials and *registered/regulated* ionizing and non-ionizing radiation sources.
- c. K Projects - all academic programs, research and development projects, and other University activities involving ionizing or non-ionizing radiation and radioactive materials.
- d Contracts and Grants - all contracts and grants requiring use of ionizing or non-ionizing radiation or radioactive materials.
- e. K Facilities and Radiation Monitoring Equipment – the suitability of facilities and radiation monitoring equipment for all University activities requiring ionizing or non-ionizing radiation or radioactive materials.
- f. K OSHA Regulations Pertaining to Ionizing Radiation - all University activities falling within the purview of the Occupational Safety and Health Act, Section 1910.96, entitled "Ionizing Radiation."
- g. K Regulations Pertaining to Non-Ionizing Radiation - all University activities falling within the purview of the LSU System Non-Ionizing Radiation Safety Procedure.

III. Monitoring of Accumulative Annual Radiation Exposure

To monitor accumulative annual radiation exposure to LSU employees who have the potential for exposure at multiple facilities, including LSU and non-LSU facilities, each campus subject to this procedure shall:

- a. Establish procedures to identify those LSU employees who have a radiation exposure potential at multiple facilities, i.e., individuals who have been issued a radiation monitoring device at each facility.
- b. Cooperate with the affected LSU employee and radiation safety personnel at the other facilities by notifying them when an LSU employee exceeds 20% of the applicable regulatory limit.

IV. Committee Operations

The Committee shall meet no less than three times each year. One meeting will be in-person with the site to rotate among the System campuses; other meetings may be by teleconference, videoconference or other means. The Chair, Vice Chair, Secretary and LSU System Radiation Safety Officer shall serve as an Executive Committee with authority to conduct official business after polling the other committee members.

At each annual spring meeting, the LSU System Radiation Safety Committee will prepare a budget for the next fiscal year. Each administrative unit within the LSU System which uses radiation and/or radioactive material shall pay a proportional share of this budget, as determined by the Committee. Should the Committee be unable to agree on proportions, the allocation decision will be made by the LSU System Vice President for Academic Affairs. Each administrative unit will be invoiced in July of each year for its respective proportion of the annual costs. Administration of the budget shall reside with the LSU System Radiation Safety Officer.

The LSU System Radiation Safety Committee shall periodically review PM-30 and revise as necessary.

A current list of members of the LSU System Radiation Safety Committee is attached with contact information.

Louisiana State University System RADIATION SAFETY COMMITTEE

November 2014

CHAIR

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SYSTEM RADIATION SAFETY COMMITTEE MEMBERS

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