

The University of Mississippi
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Facility Safety Plan (Institution-Based)

Research Operations/Standard Operating Procedures (SOPs)

The Department of Health and Safety monitors the biological, chemical, occupational, and radiological safety of the campus. The Office publishes manuals related to these safety issues; provides training and educational materials to faculty, staff, and students, as appropriate; reviews and approves research protocols related to these issues before research commences; and signs the UM Transmittal Sheet to indicate researchers' compliance with UM and federal regulations in proposals that are submitted to external sponsors for support.

The University Safety Manuals and web pages list all University policies and procedures for the safe conduct of research in the laboratories of the University. Specific Regulations include:

Biological Safety Manual: Sets biological safety policies for the University of Mississippi, Oxford Campus, and contains information, regulations and procedures to provide for the safety of personnel and the environment from biologically hazardous materials.

<http://www.olemiss.edu/safety/biomanual.html>

Chemical Safety Manual: Contains regulations and procedures specific to the use of hazardous materials at the Oxford Campus and Lafayette county properties of The University of Mississippi. These regulations and procedures apply to and are binding on all persons who receive, possess, use or dispose of hazardous chemical materials on the Oxford Campus of The University of Mississippi.

<http://www.olemiss.edu/safety/Chemsafe.html>

Radiological Safety Manual: This manual sets radiation safety policies for the University of Mississippi, and contains only regulations and procedures specific to the use of radioactive materials and radiation producing devices at the University.

<http://www.olemiss.edu/safety/Radmanual.html>

Crisis Management and Hazardous Waste Facility Contingency Plan: The purpose of this plan is to outline the emergency response procedures for the Hazardous Waste Storage Facility as well as other areas that use or store hazardous materials on the Oxford Campus of the University of Mississippi.

<http://www.olemiss.edu/safety/Plan.html>

Waste Minimization Policy: A policy to minimize the production of hazardous and non-hazardous wastes and to prevent the production of air and water pollutants.

<http://www.olemiss.edu/safety/minim.html>

Scientific Diving Safety Manual: This document represents the minimal safety standards and requirements for scientific diving.

http://www.olemiss.edu/safety/diving/dive_manual.doc

Laser Safety Manual: This manual complies with all applicable laws and regulations, including CFR Title 21 Part 1040.10, and the American National Standard for the Safe Use of Lasers (ANSI Z136.1).

<http://www.olemiss.edu/safety/laserman.html>

Waste Disposal Regulations: Includes regulations for Biological Waste, Medical Waste, Pathological Waste, Hazardous Waste, Non regulated Waste, and Radioactive Waste, as well as specific materials and classes of compounds such as Ethidium Bromide, potentially Explosive Materials, Mercury, Glassware and Sharps.

<http://www.olemiss.edu/safety/waste.html>

Responsibilities:

The University of Mississippi Department of Health and Safety is responsible to the Chancellor of the University for compliance with and enforcement of the U. S. Environmental Protection Agency (EPA) regulations; the U. S. Department of Transportation (DOT) regulations; the Mississippi Hazardous Waste Management (MHW) regulations; the Mississippi Department of Environmental Quality (MSDEQ) regulations and the Mississippi State Department of Health (MSDH) radiological regulations on the Oxford campus of the University of Mississippi.

Specific responsibilities and authority include:

1. Biological-Chemical:
 - a. Responsibility for control and disposal of all hazardous biological and chemical substances.
 - b. Authority to inspect all areas of the campus for compliance with federal and state laws governing the safe use and disposal of all hazardous materials.
 - c. Authority to implement controls for the use and disposal of all hazardous materials.
 - d. Responsibility for providing safety information concerning hazardous materials to all University personnel.
2. Radiological:
 - a. Responsibility for the duties assigned in the University Radiation Safety Manual, 1995 revised edition, and subsequent regulations imposed by MSDH under its broad license to the University.

Enforcement Authority:

The Department of Health and Safety will have the authority to enforce compliance with the regulations referenced in the University Biological, Chemical, Occupational and Radiological Safety Manuals and other applicable safety regulations for all segments of the Oxford campus.

Emergency Authority:

In the event of an emergency, the Health and Safety Officer and in his absence the Radiological Safety Coordinator has the authority to commit any and all University Resources necessary to carry out the University Contingency Plan.

Safety Training Requirements:

Safety training requirements apply to faculty, staff and graduate students working with biological, chemical, radiological materials or ionizing radiation producing devices on the Oxford Campus, as well as visiting investigators working with these materials under the supervision of trained University personnel on the campus. These training requirements will also apply to undergraduate students when they are working in these areas in other than a regularly scheduled University course. Use of any of the materials/devices listed below requires the signing of the appropriate "Safety Agreement" form.

General Biological Safety Training: All faculty, staff or graduate students working with biological materials are required to take the biological safety training program and pass a written quiz on biological safety. Annual retraining is not required.

Biosafety for Maintenance Personnel: All University maintenance personnel who are required to enter areas where personnel use or store biohazardous materials or biological waste are required to attend a specialized biological safety training course and pass a written quiz on biological safety awareness.

Human Pathogens, DNA and Human Products Safety: All University personnel and all students working with human pathogens; human blood, blood products or human body fluids; and recombinant DNA are required to have special biological training and written authorization prior to starting any work. A pre-requisite to this training is completion of the General Biological Safety Training.

General Chemical Safety Training: All faculty, staff and graduate students working with chemicals on the Oxford campus are required to complete the chemical safety training program and to pass a written examination on chemical safety. A special safety training program is required for Physical Plant Personnel.

Carcinogen Safety Training: All University personnel and all students are required to have special safety training in the handling and use of carcinogenic materials and written authorization prior to starting any work with carcinogenic compounds. A laboratory with a Class II or better Fume Hood is required for the handling of carcinogenic materials. A pre-requisite to this training is completion of the General Chemical Safety Training. Application to use carcinogens is made through the Department of Health & Safety and Final Approval is granted by the Chancellor of the University.

Radiological Materials Safety Training: All University personnel including all students working with, or in areas that use or store, radioactive material are required to have completed the Radiation Safety Training program for Materials including passing a written examination and have obtained written authorization prior to working with, or in areas that house, radioactive isotopes. Authorization of personnel to work in University laboratories where personnel use or store Radiological Materials is contingent upon their direct supervisors and Department Heads receiving and maintaining similar authorization. A pre-requisite to this training is completion of the General Chemical Safety Training program and Carcinogen approval. Annual retraining is required for continued authorization.

Radiation Generating Devices Safety Training: All University personnel and all students working with, or in areas that use or store, ionizing radiation generating equipment are required to have completed the radiation safety training program including passing the written examination and have obtained written authorization prior to starting any work with, or in areas that house, ionizing radiation generating devices. Authorization of personnel to work in University laboratories where personnel use or store Radiation Generating Devices is contingent upon their direct supervisors and Department Heads receiving and maintaining similar authorization. Annual retraining is required for continued authorization.

Approval of Research:

The Department of Health and Safety review and approval is required on research protocols involving biological, chemical, occupational, or radiological safety, prior to the start of the research.

Research protocols involving carcinogenic materials, biological or chemical hazards, radioactivity, or radiation must be submitted to Health and Safety for approval. Health and Safety will review protocols and proposals, and will forward these materials to the Institutional Review Board (IRB) for their approval.

Research involving pathogens, DNA, and/or human body parts and fluids require approval of the Institutional Biosafety Committee (IBC), an institution-wide committee.

The Department of Health and Safety must review and approve all proposals that request or receive external funding that involves any of the above-mentioned environmental safety issues.

Institutional Biosafety Committee (IBC):

The IBC was established by the institution and represents a collective expertise and experience in recombinant DNA research experiments and potential risk to public health or the environment, as outlined in Section IV-B-2 of the NIH Guidelines for Research Involving Recombinant DNA Molecules. This committee reviews, approves, and oversees projects in accordance with the responsibilities defined by the NIH.

The IBC is responsible for reviewing proposals and protocols for compliance with the NIH guidelines for research with pathogens and recombinant DNA research. This review shall include an independent assessment of the containment levels required by these Guidelines for the proposed research, an assessment of the facilities, procedures, and practices, and of the training and expertise of personnel. The IBC will also be responsible for setting containment levels as specified by NIH guidelines and direct the Department of Health and Safety (DHS) to periodically review laboratory conditions where recombinant DNA or other biohazardous research is being conducted to ensure that the requirements of the Guidelines are being fulfilled.

The Radiation Safety Committee:

This committee is composed of persons with demonstrable expertise in the areas of use of radioactive materials or radiation generating devices, and the Radiological Safety Coordinator of the Department of Health and Safety. Members approved by the Chancellor of the University. The Radiation Safety Committee advises the Radiological Safety Coordinator and makes specific recommendations to the Chancellor of the University through the Health and Safety Officer on all matters pertaining to radiological safety, and the use of radioactive materials and radiation generating devices.

Health and Safety Officer:

A permanent administrative employee of the University of Mississippi charged with the responsibility of establishing and maintaining a comprehensive environmental safety program at the University and with making recommendations to the Chancellor of the University regarding factors concerning environmental safety.

Facility Equipment and Description Related to the Research Environment

Research at the University of Mississippi may be conducted at any of several research centers and academic departments located on the Oxford campus

The Thad Cochran Research Center (TCRC), the primary facility of the National Center for Natural Products Research (NCNPR), includes specialized laboratories for plant extraction, biological screening, isolation and analytical chemistry, synthetic chemistry, molecular modeling, biochemistry/cell biology, pharmacology, toxicology, agronomics, and plant tissue culture work. The University animal research facility, located within a secure section of the facility, includes 32 animal/procedure rooms, with facilities for bio-containment, surgery, and necropsy, as well as a separate cage washing facility. The Center also provides lab and office space for the USDA Agricultural Research Service (Natural Products Utilization Research Unit). A secondary building, the Coy Waller Laboratory includes additional offices and research space, as well as an indoor horticulture facility and environmentally controlled vaults. TCRC adjoins Faser Hall which houses the Research Institute of Pharmaceutical Sciences and the academic departments of the School of Pharmacy, and Coulter Hall, the home of the Department of Chemistry and Biochemistry.

The National Center for Physical Acoustics (NCPA) contains all of the technical and support facilities required for a world class research program. Laboratories are isolated electromagnetically and mechanically. The labs include two "high bay" labs, an anechoic chamber, a reverberation chamber, and a large open bay (100' x 50' x 16'), with wave tanks, a wind tunnel, and a robotics area. Also, the facility contains a clean room, darkroom, an acoustically isolated 80-seat auditorium, a reading room, conference room, and a training laboratory. Supporting the research efforts is a fully equipped and automated machine shop, including computer controlled machining equipment, welding facilities, and a carpentry shop. An electronics shop is available for developing prototype electronics and for maintenance and modification of almost all the computational and scientific equipment at the center.

Available Personal protective equipment:

1. Safety glasses
2. Face shields
3. Lab coats
4. Aprons
5. Gloves
6. Hearing protection

Specialized safety equipment:

1. Chemical fume hoods
2. Class-II Biosafety cabinets
3. Laminar flow hoods
4. Glove boxes
5. Fire alarm and sprinkler systems
6. Fire extinguishers
7. Safety showers
8. Eye wash stations
9. Spill containment apparatus
10. Respirators

Radioactive Materials

A copy of Mississippi State Department of Health Radiological License is attached below, following the Facility Safety Director/Manager Assurance

Hazard Analysis

Biological Hazards include infectious microorganisms, animals, recombinant DNA materials, and cultured mammalian cell materials.

The Department of Health & Safety (DHS) regularly surveys all laboratories containing biohazardous materials. DHS trains all personnel involved with biohazardous materials to minimize hazards and control risks, and applies the following guidelines in implementation of policies concerning biohazardous materials:

Environmental Protection Agency, "EPA Guide for Infectious Waste Management", EPA/530-SW-86-014.

National Institutes of Health, "Guide for the Care and Use of Laboratory Animals", NIH No. 85-23.

Public Health Service Policy of Humane Care and Use of Laboratory Animals.

CDC--NIH, "Biosafety in Microbiological and Biomedical Laboratories".

Chemical Hazards include substances which are toxic, corrosive, flammable, explosive, and reactive.

DHS regularly surveys all laboratories containing hazardous chemicals. DHS trains all personnel involved with hazardous chemicals to minimize hazards and control risks, and applies the following guidelines in implementation of policies concerning hazardous chemicals:

The Resource Conservation and Recovery Act, Public Law 94-580

Solid Waste Disposal Act of 1980.

Comprehensive Environmental Response, Compensation and Liability Act

The Superfund Amendments and Reauthorization Act

Environmental Protection Agency, Code of Federal Regulations, 40, Parts 100 to 149, and 49, Parts 190 to 399, current revision.

Department of Transportation, Code of Federal Regulations, 49, Parts 100 to 177, current revision.

Mississippi Hazardous Waste Management Regulations, Mississippi State Board of Health, current revisions and amendments.

Radiological Hazards include radioactive materials and radiation producing devices.

DHS regularly surveys all laboratories containing radioactive materials and radiation producing devices. DHS trains all personnel involved with radiological hazards to minimize hazards and control risks.

In agreement with the U.S. Nuclear Regulatory Commission (NRC) the State of Mississippi has a program of radiation safety which satisfies the requirements of Federal law and regulation. The control of radiation in Mississippi is under the regulatory direction of the Division of Radiological Health (DRH) of the MSDH as mandated by State law set forth in the State Radiation Protection Act of 1976.

Under the University of Mississippi's Broad License, DHS maintains authorization to use, purchase, possess, or have radioactive material or radiation generating devices; provides procedures for ordering or otherwise acquiring radioactive materials; provides safety precautions to follow when using radioactive materials, sealed sources, or other ionizing radiation producing devices; provides emergency procedures for handling accidents involving radioactive materials, sealed sources, or other radiation producing devices; and procedures for requesting the disposal of radioactive materials or radiation generating devices.

DHS applies the following guidelines in implementation of policies concerning radiological hazards:

Regulations for Control of Radiation in Mississippi, Division of Radiological Health, Mississippi State Department of Health, Jackson, November 1992 and revisions, November 1994.

Research and Special Programs Administration, Department of Transportation, 49CFR100-177, current version

U.S. Nuclear Regulatory Commission, Code of Federal Regulations, Section 10.

U.S. Department of Transportation, Code of Federal Regulations, Section 49.

Biological Defense Research Program Requirements

The University does not participate in the Biological Defense Research Program

Facility Safety Director/Manager Assurance

- ◆ I assure that this institution has an existing institutional safety and occupational health program that meets appropriate Federal, State, and Local regulations as required by law, as well as the National Institute of Health Guidelines for Research Involving DNA Molecules, dated April 2002.
- ◆ I assure that all hazards associated with the research laboratories have been identified, eliminated, and/or controlled in such a manner as to provide for a safe research laboratory environment.
- ◆ I accept full responsibility for submitting the annual **Facility Safety Plan Status Report** including significant changes in facility, safety equipment, and safety procedures by fax to 301-619-6627, by e-mail to [USAMRMC MPMC SS](mailto:USAMRMC_MPMC_SS), by mail to Commanding General, U.S. Army Medical Research and Materiel Command, ATTN: MCMR-SS, 504 Scott Street, Fort Detrick, MD 21702-5012.
- ◆ I assure that I have consulted with all current PI's holding USAMRMC awards concerning this institution's safety policies and procedures and will consult with all future PI's holding USAMRMC awards concerning this institution's safety policies and procedures.
- ◆ I assure that all Facility Safety Plan requirements are in compliance with Local, State and Federal general industry standards.
- ◆ If applicable, I assure Infectious Agent and Toxin (IAT) research programs will follow the recommended guidelines established in the latest editions of the CDC-NIH publication Biosafety in Microbiological and Biomedical Laboratories (BMBL); Army Regulation 385-10, Chapter 20 (Biological Safety); and DA Pamphlet 385-69 (Safety Standards for Microbiological and Biomedical Laboratories).
- ◆ Use of Infectious Agents and Toxins (IAT) as defined below: ☒ Yes ☐ No
"Infectious Agent or Toxin = a viable microorganism, or its toxin which causes or may cause human disease, and includes those agents and includes those agents classified as Risk Group 2 or higher as defined in the latest edition of the Biosafety in Microbiological and Biomedical Laboratories (BMBL)."

Edward M. Movitz Health and Safety Officer

Name of Institution's Safety Director/Manager (print)



Signature

02 Jan 2013

Date

Mailing Address: P0 Box 1848
Street
University, MS 38677-1848
City State Zip Code

Phone Number: (662) 915-5433

Fax: (662) 915-5480

E-mail Address: movitz@olemiss.edu Web Site: <http://www.olemiss.edu/safety/>

3. Facility Safety Plan Status Report

A Facility Safety Plan Status Report must be submitted **annually** starting no later than 1 year **after** obtaining the initial approval of the institution's Facility Safety Plan. To determine if your organization has an approved Facility Safety Plan, check our website listing at:

https://mrmc.amedd.army.mil/docs/rcq/sohd/facility_safety_plan_approved_institutions.pdf

The Facility Safety Director/Manager must provide a brief description of any parts of the Facility Safety Plan that may have changed during the past 12 months. (Additional pages may be attached.)

During the past 12 months:

1. Have any change(s) in Research Operation Safety Procedure(s) been made?

Yes _____ No ☒ X _____

If yes, briefly describe:

2. Have any modifications to the facility, equipment, and description (e.g., new equipment purchased, hood ventilation certification) been made?

Yes ☒ X _____ No _____

If yes, briefly describe: Fume Hoods were upgraded recently

3. Hazard Analysis: Have any new hazards been identified for any of the awards supported by the USAMRMC?

Yes _____ No ☒ X _____

If yes, provide a hazard analysis for each new hazard.

4. Radioactive Materials: Have any significant change(s) occurred in the use of the radioactive materials?

Yes _____ No ☒ X _____

If yes, briefly describe:

Are there any additional radioactive materials in use?

Yes _____ No ☒ X _____

If yes, list additional material(s).

Is the radioactive material licensure current?

Yes ☒ X _____ No _____

If no, please explain.

I certify that all of the above elements are true and correct to the best of my knowledge, and I assure that this institution provides a safe environment for its employees working in research laboratories in accordance with Federal, State, and local government regulations. This safety office provides employee safety training and periodic laboratory inspections in an effort to minimize, eliminate, or control potential hazards to the employees and the public.

I understand that the Safety Office, USAMRMC, may conduct periodic site visits in order to ensure the indicated elements are in compliance with regulatory requirements.

Name of the Institution:

The University of Mississippi

Name of Safety Director/Manager:

Edward Movitz Health & Safety Officer

Signature:  Date: 02 January, 2013

Safety Director/Manager E-mail Address: movitz@olemiss.edu

Phone Number: (662) 915-5433

Fax Number: (662) 915-5480

Facility Safety Plan approved by USAMRMC Safety Office: _____ Date _____



MISSISSIPPI STATE DEPARTMENT OF HEALTH

Radioactive Material License

Pursuant to the Mississippi Radiation Control Act and Mississippi State Board of Health Environmental Regulations on radiation, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the State Board of Health and orders of the Division of Radiological Health, now or hereafter in effect and to any conditions specified below.

Licensee		3. License Number
1. Name	The University of Mississippi Health & Safety Department	MS-EBL-01
2. Address	Health & Safety Building, Room 100 91 Hickory Lane University, Mississippi 38677 Attn: Radiation Safety Officer	4. Expiration Date September 1, 2013
5. Radioactive Material (Element and Mass Number)	6. Chemical and/or Physical Form	7. Maximum Radioactivity and/or quantity of material which licensee may possess at any one time.
A. Any radioactive material with Atomic Nos. 1 through 83.	A. Any	A. Total activity not to exceed 5 curies per radionuclide.

8. Authorized Use

A. through K. Research and development as defined in the Mississippi State Board of Health Regulations for Control of Radiation, Section 100, and instructional purposes.

Date August 22, 2011

Amendment No. 70

For The Mississippi State Department Of Health

by

Division of Radiological Health
Jackson, Mississippi 39215

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5. Radioactive Material (Element and Mass Number)	6. Chemical and/or Physical Form	7. Maximum Radioactivity and/or quantity of material which licensee may possess at anyone time.
B. Hydrogen-3	B. Any	B. 20 curies
C. Polonium-210	C. Any	C. 2 curies
D. Radium-226	D. Any	D. 100 millicuries
E. Uranium-238	E. Any	E. 5 kilograms
F. Thorium-232	F. Solid	F. 10 microcuries
G. Plutonium-239	G. Any	G. 3 microcuries
H. Natural Uranium	H. Any	H. 1 kilogram
I. Polonium-208	I. Any	I. 10 millicuries
J. Americium-241	J. Any	J. 10 millicuries
K. Plutonium-242	K. Any	K. 3 microcuries
L. Americium-241: Beryllium	L. Sealed Source (Troxler Drawing No. A-102451)	L. One (1) source not to exceed 44 millicuries.
M. Cesium-137	M. Sealed Source (CPN Model CPN-131)	M. One (1) source not to exceed 10 millicuries.
N. Americium-241: Beryllium	N. Sealed Source (CPN Model CPN-131)	N. Two (2) source not to exceed 50 millicuries.
O. Cesium-137	O. Sealed Source (Tech-Ops Model 77302)	O. One (1) source not to exceed 165 millicuries.

Total Possession of all
Radioactive Material Shall
Not Exceed 50 Curies.

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8. Authorized Use (continued)

- L. To be used in Troxler Model 3216 roof moisture gauge for determining the moisture content of roofing materials.
- M. To be used in Campbell Pacific Model 500 series moisture/density gauge for determining the density of materials.
- N. To be used in Campbell Pacific Models 500 moisture/density gauge and 503 DR Hydroprobe moisture depth gauge for determining the moisture content of materials.
- O. To be used in Tech-Ops Model 773 calibrator for survey meter calibration.

CONDITIONS

- 9. Licensed material may be used only on the University of Mississippi properties. Licensed material contained in the moisture/density gauges must be stored in an area designated and approved by the University of Mississippi Radiation Safety Officer.
- 10. The licensee shall comply with the provisions of the Mississippi State Board of Health Regulations for Control of Radiation, Section 100, "General Provisions," Section 300, "Licensing of Radioactive Material," Section 400, "Standards for Protection Against Radiation," Section 1000, "Notices, Instructions and Reports to Workers; Inspections," and Section 1300, "Transportation of Radioactive Material."
- 11. Licensed material shall be used by, or under the supervision of, individuals designated by the University of Mississippi Radiation Safety Committee and W. Scott Rone, Radiation Safety Officer.
- 12. The Radiation Safety Officer for the activities authorized by this license is W. Scott Rone.
- 13. The licensee shall test each sealed source for leakage or contamination at intervals not to exceed six (6) months or at alternative intervals approved by the Agency, an Agreement State, or the U. S. Nuclear Regulatory Commission, as required by Section 400.16 of the Mississippi State Board of Health Regulations for Control of Radiation.
- 14. A. Detector cells containing titanium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 225 degrees Centigrade.
 - B. Detector cells containing scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 325 degrees Centigrade.

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CONDITIONS (continued)

- C. Detector cells containing Nickel-63 plated sources shall only be used in conjunction with a properly operating temperature control mechanism as specified by the gas chromatography manufacturer.
15. Detector cells containing licensed material shall not be opened or the sources removed from the detector cell by the licensee.
16. The licensee shall not use licensed material in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this license.
17. Experimental animals administered licensed materials or their products shall not be used for human consumption.
18. A. Individuals involved in operations which utilize, at any one time, more than 100 millicuries of Hydrogen-3 in a non-contained form, other than metallic foil, shall have bioassays performed within one (1) week following a single operation and at weekly intervals for continuing operations.
- B. (1) Tritium shall not be used in such a manner as to cause any individual to receive a radiation exposure such that urinary excretion rates exceed 28 microcuries of tritium per liter when averaged over a calendar quarter.
- (2) A report of an average concentration in excess of the limit specified in B.(1) above for any individual shall be filed, in writing, within thirty (30) days of the end of the calendar quarter with the Division of Radiological Health, Mississippi State Department of Health.
- (3) The report shall contain the results of all urinalyses for the individual during the calendar quarter, the cause of the excessive concentrations, and the corrective steps taken or planned to assure against a recurrence.
- (4) Any single urinalysis which discloses a concentration of greater than 50 microcuries per liter shall be reported, in writing, within seven (7) days of the licensee's receipt of the results, to the Division of Radiological Health, Mississippi State Department of Health.
19. Individuals involved in frequent operations (less than every two weeks) which utilize, during any one (1) quarter, one (1) millicurie of liquid Iodine-125 and/or Iodine-131 must have a bioassay performed within six (6) to seventy-two (72) hours following the use of the licensed material. Infrequent use of Iodine-125 and/or Iodine-131 (greater than every two weeks) will necessitate a bioassay within ten (10) days following the use of the licensed material. Bioassays may be either in vivo or in vitro measurements; however, the licensee must maintain on file bioassay procedures and results for review by the Division of Radiological Health, Mississippi State Department of Health.

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CONDITIONS (continued)

20. The specified possession limit includes all licensed material possessed by the licensee under this license whether in storage, held as waste, or otherwise in use.
21. Sealed sources containing licensed material shall not be opened.
22. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of inventories shall be maintained for three (3) years from the date of the inventory for inspection by the Division of Radiological Health and shall include the quantities and kinds of radioactive material, location of sealed sources, the date of the inventory, and the name of the individual conducting the inventory.
23. The licensee shall instruct all users of radioactive material listed in Item Nos. 5.L., 5.M., and 5.N. that any maintenance or repair on the gauges involving removal of the source holders shall be performed only by the device manufacturer or by other persons specifically authorized by the Nuclear Regulatory Commission or an Agreement State to perform such services.
24. Each portable nuclear gauge shall have a lock designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge must be locked when in transport, storage, or when not under the direct surveillance of an authorized user.
25. The licensee is authorized to hold radioactive material for decay-in-storage before disposal in ordinary trash provided:
 - A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of ten (10) half-lives.
 - B. Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background with a typical low-level laboratory survey instrument. All radiation labels shall be removed or obliterated.
26. Prior to the use of licensed material on property not owned by the University of Mississippi, or prior to the use of licensed material in such a manner as to cause dispersal of licensed material onto property not owned by the University of Mississippi, a written notice must be submitted to the Division of Radiological Health, Mississippi State Department of Health. The notice must include the isotope(s) to be used, the activity and form of each isotope, and the proposed date and location of use.
27. No plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee.

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CONDITIONS (continued)

28. Each portable gauge licensee shall use a minimum of two independent physical controls that form two tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee.
29. If, in an emergency, it becomes necessary for the licensee to evacuate the facility at which radioactive material is stored, it shall be the responsibility of the licensee to notify the Division of Radiological Health prior to leaving. The licensee shall submit a detailed description of how the storage location was secured prior to leaving and the licensee's temporary address, phone number(s) or other means of being contacted. This information shall be kept updated until the licensee is able to return to the licensed storage location.
30. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 5., 6., and 7. of this license in accordance with statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Mississippi State Board of Health Regulations for Control of Radiation shall govern the licensee's statements in application or letters, unless the statements are more restrictive than the regulations.

Application dated August 31, 2007, signed by W. Scott Rone,
The University of Mississippi's Radiation Safety Manual, received September 4, 2007,
Letter dated August 25, 2008, signed by W. Scott Rone,
Letter dated January 27, 2011, signed by W. Scott Rone, and
Letter dated August 22, 2011, signed by W. Scott Rone.