
RADIOACTIVE MATERIAL PROGRAM

1. PURPOSE

This Directive sets forth the policy, authorities, and responsibilities for the handling, storages and use of radioactive materials in the Federal Grain Inspection Service (FGIS) laboratories. It is FGIS policy to ensure that all users of radioactive materials comply with current Nuclear Regulatory Commission (NRC) and the United States Department of Agriculture (USDA) Radiological Safety Committee's (USDA-RSC) directives, policies, and guidelines.

2. AUTHORITIES

The NRC regulates the storage, handling, and use of radioactive materials in USDA facilities. NRC classifies facilities that use radioactive material into several categories. FGIS has only Category III facilities. These facilities use licensed radioactive material in sealed sources.

USDA Administrative Regulation (1-AR-381) established the USDA-RSC which is responsible for formulating and enforcing procedures, regulations, instructions and other measures necessary to the administration of radiological safety function within USDA.

There is a USDA Radiological Safety Officer (USDA-RSO) who provides day-to-day management oversight of radiological safety functions within USDA.

3. RESPONSIBILITIES

- a. The Administrator is responsible for ensuring that FGIS storage, handling, and use of radioactive materials is consistent with the standards established by the NRC and the USDA-RSC.
- b. Division Directors share with the Administrator the responsibility for the safe storage, handling, and use of radioactive materials.
 - (1) The Director, Compliance Division, will ensure that radiological material storage, handling, and use are reviewed as part of the FGIS compliance program.
 - (2) The Director, Field Management Division, will provide oversight of the Radiological Safety Program at the Commodity Testing Laboratory. The Director will ensure that all persons with duties involving radioactive materials or equipment have a rating element on those duties in their performance appraisals.
 - (3) The Director, Quality Assurance and Research Division, will provide oversight of the Radiological Safety Program at the research laboratory. The Director will ensure that all persons with duties involving radioactive materials or equipment have a rating element on those duties in their performance appraisals.
- c. The FGIS Safety & Occupational Health Manager (SOHM) is the Agency representative to the USDA-RSC. The SOHM is responsible for providing guidance and assistance in implementing the Agency Radioactive Materials Program. The responsibilities include evaluating FGIS

compliance with NRC and USDA-RSC guidelines.

- d. The Collateral Duty Safety Officers at the Commodity Testing Laboratory and at the Quality Assurance and Research Division will serve as Radiological Safety Representatives (RSR) for their respective laboratories. Their duties include:
- (1) Developing a written Radioactive Material Safety Program as part of the Chemical Hygiene Plans for their laboratories. This program will provide for the safe storage, use, and monitoring of radioactive material/equipment used in the laboratory. It will cover compliance with the most current editions of USDA AM 124.1, "Radiological Safety and Procurement of Radioactive Material and/or Radiation-Emanating Equipment," NRC regulations, and 29 Code of Federal Regulations Part 1910.96. Provisions for providing initial and annual refresher radiation safety training for all Responsible Users, Associate Users, and Ancillary Staff will be included.
 - (2) Ensuring that all duties assigned the Responsible User are accomplished properly.
 - (3) Conducting and documenting a detailed program evaluation at least once every 3 months to ensure that radioactive material or equipment is stored, handled, and used in accordance with applicable NRC and USDA-RSO directives and guidelines. At a minimum:
 - (a) Review required NRC and USDA radiological related notices, reports, and documents for accuracy.
 - (b) Ensure that Responsible Users, Associate Users, and Ancillary Staff have received the required NRC safety training during the previous 12 months.
 - (c) Ensure that radioactive material/equipment is used only in approved areas by approved individuals.
 - (d) Ensure that the required signs, labels, license/permit, and NRC regulations are properly posted.
 - (e) Ensure that radioactive material/equipment is accounted for and that an acceptable security system is in place to prevent unauthorized use or removal from the workplace.
 - (f) Ensure that radioactive material/equipment is not used or stored in an area containing flammable liquids or other high risk combustible materials.
 - (4) Maintaining a radioactive material reference library which contains:
 - (a) 10 CFR Parts 19 and 20,
 - (b) 29 CFR Part 1910,
 - (c) AM 124.1, "Radiological Safety and Procurement of Radioactive Material and/or Radiation Emanating Equipment," and "USDA Radioactive Material Approval Use Conditions for Electron Capture Detectors."
- e. Responsible Users are the chemists or scientists who are identified on the USDA license/permit as the person responsible for the safe storage, use,

and handling of a specific item of radioactive material or equipment. They are responsible for:

- (1) Assisting the RSR in developing the written "Radioactive Material Safety Program."
- (2) Ensuring that a USDA license/permit is obtained from the USDA-RSO prior to obtaining, storing, using, or disposing of radioactive material/equipment.
- (3) Ensuring that USDA license/permits are current and show the correct Responsible User. Radioactive material/equipment cannot be used without a Responsible User who has received approval from the USDA-RSC for such use. When a transfer of a Responsible User occurs, the new Responsible User cannot use the material/equipment until the approval has been granted.
- (4) Ensuring that the radioactive material and radiation-emanating equipment is used only by authorized individuals for the purposes approved and in accordance with the rules and procedures prescribed by the USDA-RSC and/or the RSO. No experiments are to be conducted in a location other than the laboratory designated for such use.

Transfer, exchange, or other disposition of radioactive material and/or radiation-emanating equipment to other persons will not be made without prior approval of the USDA-RSC.

- (5) Training where any cooperative work project involves the use of radioactive material and/or radiation-emanating equipment and is carried out under the supervision of other than a USDA agency. Approval must be obtained from the USDA-RSC before any USDA employee can participate.
- (6) Conducting and documenting weekly walk through inspections of the area where radioactive materials, devices, and/or equipment is stored, handled, or used. Ensure that all radioactive materials, devices, and equipment are accounted for and that the storage and use are in accordance with the NRC and USDA-RSC safety and operating regulations for their use.
- (7) Ensuring that radioactive material containers and/or equipment are properly labeled with the radiation symbol and with the words "Caution Radioactive Material." 29 CFR 1910.96 shows examples of the proper signs. Post a similar sign in all laboratory areas where radioactive materials are stored or used.
- (8) Ensuring that radioactive materials and or/equipment are secure against unauthorized removal from a working area or a place of storage. When the Responsible User or an Associate User are not present in the workplace, the material should be in a locked room or other secure storage methods taken.
- (9) Ensuring that radioactive materials and/or equipment are protected from the risk of fire. Ensure that the materials or equipment are not used or stored in an area which has large quantities of flammable liquids or other than low risk combustible solids.
- (10) Displaying copies of the USDA license/permit, the NRC Form 3, and appropriate excerpts of 10 CFR Parts 19 and 20 in the room where radioactive materials are stored or used.
- (11) Ensuring that all wipe tests checking for Radioactive leakage are

completed when scheduled by the USDA-RSC. Failure to complete the leak test in a timely manner (as specified by the USDA-RSC) will result in suspension and/or revocation of the USDA license/permit.

- (12) Ensuring that Associate Users (laboratory technicians using the radioactive material or equipment under the supervision of the Responsible User) are properly trained in the safe storage, use, a handling of radioactive material or equipment.
- (13) Ensuring that Associate Users and Ancillary Staff (employees other than laboratory staff, such as clerical, janitorial, administrative) trained to recognize potential hazards caused by improper storage, use or handling of radioactive material or equipment, and how to report such hazards to their supervisors.
- (14) Maintain a file containing copies of permits/licenses, quarterly inspections, weekly walk-throughs, special approvals, training records, etc.

/s/ David R. Shipman
Acting Administrator