

Policy 2207
Radiation Safety

Date of Current Revision: March 2023

Primary Responsible Officer: Director of Emergency and Risk Management

Secondary Responsible Officer: Vice President for Research, Economic Development and Innovation

1. PURPOSE

James Madison University has established a Radiation Safety Program to ensure compliance with existing state and federal requirements and to afford a maximum degree of protection to university personnel, students, visitors, and the general public from radiation hazards arising from the use of radiation-generating sources and machines. This program is a requirement of both the university's Commonwealth of Virginia Radioactive Materials license and the Virginia Department of Health (VDH) regulations, which requires the registration of radiation-generating machines.

2. AUTHORITY

The Board of Visitors has been authorized by the Commonwealth of Virginia to govern James Madison University. See Code of Virginia § 23.1-1600; § 23.1-1301. The Board has delegated the authority to manage the university to the president.

STATE OR FEDERAL STATUTE AND /OR REGULATION

U.S. Nuclear Regulatory Commission Code of Federal Regulations, Title 10, Atomic Energy, Part 20, Standards for Protection Against Radiation.

Virginia Department of Health, Title 12, Agency 5, Chapter 481, Radiation Protection Regulations.

Virginia Regulatory Guide, ORH-720-F Academic, R&D and Other Licenses of Limited Scope.

3. DEFINITIONS

ALARA

As Low As Reasonably Achievable – requires every reasonable effort to maintain exposures to ionizing radiation as far below dose limits as practical.

Authorized User

Any person whose training and experience have been reviewed by the Virginia Department of Health, who is named on the license, and who uses or directly supervises the use of licensed material.

Radiation Safety Committee (RSC)

Comprised of members appointed by the Vice President for Research, Economic Development and Innovation (REDI) and chartered with ensuring safe use of ionizing radiation through procedure development and overseeing program compliance.

Radiation Safety Manual (RSM)

The collection of procedures developed and approved by the RSC detailing how to safely handle ionizing radiation at JMU to preserve the principle of ALARA and to ensure regulatory compliance.

Radiation Safety Officer (RSO)

The person within an organization responsible for the safe use of radiation and radioactive materials, as well as regulatory compliance, and a member of the RSC.

4. APPLICABILITY

All university faculty, staff, and students using radioactive materials and/or ionizing radiation-generating machines are subject to the provisions of this policy.

5. POLICY

The university has established a Radiation Safety Program commensurate with the scope of its licensed activities and to ensure compliance with provisions of the U.S. Nuclear Regulatory Commission Code of Federal Regulations 10 CFR Part 20 and the Virginia Department of Health 12VAC5 chapter 481 radiation protection regulations.

As a licensee, the university is required to keep radiation doses to workers and members of the public as low as reasonably achievable (ALARA), ensure security of licensed material, and make required notifications to the Virginia Department of Health. As a licensee, the university must also maintain a Radiation Safety Committee, which works with the administration and the Radiation Safety Officer to establish procedures for, and administer, the Radiation Safety Program.

6. PROCEDURES

The procedures to be followed to ensure compliance with the policy are detailed in the Radiation Safety Manual maintained on the [Radiation Safety webpage](#).

7. RESPONSIBILITIES

All departments, offices, and employees that generate, receive, or maintain public records under the terms of this policy are also responsible for compliance with Policy [1109](#) – Records Management.

The Radiation Safety Committee (RSC) establishes procedures for the procurement, storage, use, and disposal of radioactive sources and radiation-generating machines and publishes these procedures in the Radiation Safety Manual. The RSC administers the Radiation Safety Program according to the manual. The primary responsibilities of the RSC are to:

- Ensure that procedures for the procurement, use, and care of radioactive materials and radiation-generating machines at the university are established, maintained, and are in accordance with VDH regulations and conditions of the license; and,
- Ensure that the RSO and Authorized Users effectively administer the Radiation Safety Program, and that all use of radioactive materials and the operation of radiation-

generating machines are accomplished safely, as well as in accordance with federal and state regulations and the conditions of the license.

The Vice President for REDI (or their designee) appoints the RSC members to a three-year term and appoints the RSC Chairperson to a four-year term. Removal of such appointments is at the discretion of the Vice President for REDI.

The Radiation Safety Officer (RSO) reports to the University Director of Emergency Services Management. The primary responsibilities of the RSO are to:

- Ensure that safe radiological working conditions are established and maintained for all university personnel, students, visitors, and the general public;
- Ensure compliance with all applicable federal, state, and local regulations;
- Fulfill the duties of the Radiation Safety Officer specified in NRC NUREG-1556 Vol. 7. The manner in which each of these responsibilities is carried out is described in the Radiation Safety Manual; and,
- Serve as a non-voting member of the RSC.

Authorized Users (AUs) are responsible for the safe use of all radioactive materials used in their laboratory spaces and for ensuring that all applicable regulations and university policies are followed at all times.

8. SANCTIONS

Sanctions will be commensurate with the severity and/or frequency of the offense and may include termination of employment.

9. EXCLUSIONS

None.

10. INTERPRETATION

The authority to interpret this policy rests with the president and is generally delegated to the Vice President for Research, Economic Development and Innovation.

Previous version:

Approved by the president: March 2023