HANDBOOK OF OPERATIONS
INVOLVING THE USE OF RADIATION SOURCES

MANAGEMENT OF RADIATION SAFETY

1.1 GENERAL

Responsibility for management of the University of Missouri is vested in the Board of Curators. Executive responsibility and authority for administration of operations within the University, consistent with the policy set by the Board, are delegated to the President. The President, in turn, delegates to the Chancellors the responsibility and the authority for execution of operations conducted on each of the campuses. The organizational chart on page 1-4 shows the interrelationships of the elements of the radiation safety program for the St. Louis campus.

Based on this document, the Radiation Safety Officer (RSO) develops and maintains procedures necessary to establish uniform practice throughout the campus for the use of radioactive materials and other hazardous sources of radiation. Coordination and surveillance of procedural, monitoring, and control functions by the Radiation Safety Officer are established to insure that sources of radiation are being procured, used, and disposed in a safe manner. Mechanisms established to provide this oversight are outlined herein.

The Chancellor is responsible for providing adequate support for the campus health physics operations. The Chancellor may delegate this responsibility to the head of an operating division which has related interests or capabilities. Whenever this support cannot be provided adequately, the program of use of radiation sources will be curtailed. The RSO will continuously evaluate the campus program and report the findings periodically to the Chancellor or Chancellor's designee.

1.2 RESPONSIBILITIES OF THE RADIATION SAFETY OFFICER

The Radiation Safety Officer oversees and participates in the control of radiation hazards arising from utilization of radiation sources as designated in the license. In this capacity the RSO:

- Implements the policies of the campus,
- Reviews all uses of sources to insure compatibility with appropriate license conditions,
- Provides liaison to the NRC in negotiations for licenses on behalf of the Chancellor,
- Develops and maintains uniform methods, standards, and procedures for appropriate health physics coverage,
- Provides consultation on radiation safety issues to investigators, to Institutional Safety staff, and to others having a need for such information,
- Provides staff assistance to the administration of the campus as required,
- Designs, duplicates, and maintains a supply of all standard forms for health physics use,
- Writes and publishes all general guidelines or procedures for radiation safety,
- Provides an audit of the Radiation Safety program for the Chancellor or Chancellor's designee,
- Performs investigations of health physics related activities on the campus. In the event of persistent failure by an authorized user under the license to satisfy the performance standards established, the consultant RSO shall inform the Institutional Safety Office of the situation, and report the results of any investigations to the person designated by the Chancellor;
- Provides the follow-up necessary to insure, when necessary, that appropriate corrective action has been taken, and reports to the Chancellor or designee the status of any pending corrective action.

If an emergency condition occurs, the Radiation Safety Officer shall be notified immediately by the user, department involved, or Institutional Safety designee and the RSO shall respond as follows:

- Determine if appropriate initial action has been taken, and if not, go to the site of the emergency and initiate such action.
- If deemed necessary, take direct action to safeguard personnel and facilities. Such action includes the prompt shutdown of a radiation-producing device, a laboratory in which radioactive materials are used, or a facility in which radiation sources are present. The RSO will then report to the Institutional Safety designee, or other appropriate campus administrator, to state the reasons for the extraordinary action.
- Report to the NRC incidents arising from licensed activities as required by the Federal regulations.
- Provide appropriate follow-up to ensure that license conditions continue to be met.

1.3 RESPONSIBILITIES OF THE HEALTH PHYSICS OFFICE

Administration and support of the Radiation Safety program is the ultimate responsibility of the Chancellor. Responsibilities for program implementation are delegated through Administrative Services to the Director of Institutional Safety, who further directs the Health Physics staff in the Environmental Health and Safety (EHS) office. Through this organizational structure, the Radiation Safety program provides for the following:

- Compliance with all conditions of the license.
- Regular inspections of the laboratory facilities of each investigator licensed and authorized to use radiation sources.
- Evaluation of applications for use of radiation sources to assure that the campus can provide adequate support and meet anticipated license requirements.
- Control procurement of radioactive material as required by University Procedures
- Develop, operate, and maintain a facility suitable for the storage of radioactive wastes for decay to background or preparatory to disposal by a licensed contractor.
- With the assistance of the licensed users maintain releases to levels as low as is reasonably achievable.
- Assist users in the development of special procedures as necessary or requested.

1.4 MANAGEMENT STRUCTURE FOR RADIATION SAFETY