



TEXAS TECH™

Operating Policy and Procedure

OP 60.11: Procurement, Usage, and Disposal of Radioactive Materials, Radiation Producing Devices, and Lasers

DATE: January 19, 2022

PURPOSE: It is necessary that proper policies and procedures be employed in the purchase, use, and disposal of radioactive material radiation producing equipment (RPE) and/or lasers being used on the Texas Tech University campus. All such policies and procedures must conform to the criteria established by Texas Tech University's Radioactive Material License (L01536), Certificate of Registration (R-00574), and Laser Registration (Z00130).

REVIEW: This Operating Policy/Procedure (OP) will be reviewed in September of every fourth year by the Assistant Vice President for Environmental Health & Safety with substantive revisions submitted to the Associate Vice President for Research (Research Integrity), the Vice President for Research & Innovation (VPR), and the Provost and Senior Vice President (PSVP). This OP will be reviewed again in 2025.

POLICY/PROCEDURE

1. Radiation/Laser Safety Committee

- a. The Radioactive Material License (L01536), the Certificate of Registration (R-00574), and Laser Registration (Z00130), which authorizes the use of radioactive materials (RAM) and radiation producing equipment (RPE) at Texas Tech University, requires that all such use be administered by the Radiation/Laser Safety Committee. This committee is appointed by the PSVP and is responsible directly to her/him.
- b. The Radiation/Laser Safety Committee is composed of:
 - (1) The Radiation Safety Officer (ex officio);
 - (2) The TTU Laser Safety Officer (ex officio);
 - (3) Three or more faculty members active in the use of radioactive materials;
 - (4) Two or more faculty members active in the use of lasers;
 - (5) At least one faculty member who regularly uses radiation producing equipment;
 - (6) A legal consultant from the TTU School of Law;
 - (7) Two or more faculty members who are nonusers of RAM, RPE, or lasers;

- (8) The Assistant Vice President for Environmental Health & Safety; and
- (9) The Associate Vice President for Research (Research Integrity).

Members of the committee, other than those specified by virtue of position, will be appointed by the PSVP. Each will serve a term of three years, except when lesser terms may be required to maintain balanced membership and continuity of committee operations. Appointments will be made on or before September 1 of each year.

- c. The committee is required to meet once a month or as situations demand.

2. Radiation and Laser Safety Officers

The Radiation and Laser Safety Officers are responsible for making on-site inspections, keeping records, assisting users, and maintaining liaison with federal and state officials.

3. Procurement of Radioactive Materials, Radiation Producing Devices, and Lasers

- a. All persons wishing to use RAM, RPE, or lasers must first obtain authorization from the Radiation and Laser Safety Committee. Forms for this purpose may be obtained from the Radiation and/or Laser Safety Officer, Office of Environmental Health & Safety.
- b. Specific procedures for the purchase of RAM, RPE, or lasers are contained in the Texas Tech University Policies and Procedures Manual for Radiation Protection. A copy of this manual is provided to each licensee by the Radiation and Laser Safety Officers after authorization of a sublicense for that particular use is granted by the Radiation and Laser Safety Committee.
- c. Transfer or disposal of radioactive materials, radiation producing machines, or lasers must be authorized by and coordinated through the Radiation and/or Laser Safety Officer.
- d. All lasers pertaining to medical, scientific, and research equipment with hazard classifications of Class IIIB and IV must comply with the above requirements.
- e. Exemptions to this requirement are all general office supplies purchased from office suppliers. A few examples are classroom laser pointers, laser printers, and projector remote controls. The hazard classifications of these exclusions are Class I, II, IIIA.

4. Equipment/Material Other than Radiation

- a. All persons receiving any equipment through purchase, loan, or gift must ensure the following:
 - (1) The equipment does not contain radioactive material;
 - (2) The equipment is below acceptable levels for radiation in accordance with TAC 289.202(ggg)(3), available from the Department of Environmental Health & Safety; and
 - (3) The equipment operates under all current TTU and state requirements or is capable of being upgraded to meet these requirements.

If the equipment does contain RAM, refer to section 3 of this OP.

- b. Persons receiving equipment found to be contaminated above acceptable levels are responsible for decontamination and/or disposal.

5. Use of Radioactive Materials, Radiation Producing Equipment, and Lasers

- a. To assure the protection of all university personnel and to maintain compliance with the stipulations of the Texas Tech University Radioactive Material License, safe and proper procedures must be followed at all times by the sublicensee and those under this supervision.
- b. Specific procedures that must be followed are contained in the TTU, state, and federal regulations.
- c. The Radiation and Laser Safety Officers are authorized and enjoined to make routine inspections of laboratory areas where RAM, RPE, and/or lasers are used. The Radiation and Laser Safety Office is empowered by the Radiation and Laser Committee to shut down any work area in which there is unsafe and/or unauthorized use of RAM, RPE, and/or lasers.

6. Disposal of Radioactive Materials

The disposal of RAM is strictly controlled by state and federal regulations. To assure compliance with these regulations, materials will be disposed of only after consultation with and the approval of the Radiation Safety Officer.

7. Emergency Action

- a. Approved emergency actions are specified in the Policies and Procedures Manual for Radiation Protection. In case of an emergency, the Radiation and/or Laser Safety Officer will be contacted immediately. Decontamination procedures will be performed by the sublicensee under the supervision of the Radiation and/or Laser Safety Officer.
- b. Emergency Contacts:
 - (1) Matthew Looney, Radiation Safety Officer
Office Phone: 806.742.3876
 - (2) Texas Department of State Health Services
512.458.7460 (24-hour emergency number)