THE UNIVERSITY OF TENNESSEE
HEALTH SCIENCE CENTER

UT Health Science Center: LS02 - Laser Registration and Inventory Procedure	
Version 1	**Publication Date: 10/30/2025**

Objective

This procedure establishes registration requirements and process for all UTHSC class 3b and class 4 lasers and all embedded lasers.

Scope

This procedure has been developed and implemented by UTHSC Research Safety Affairs and approved by the UTHSC Radiation Safety Committee. This procedure applies to all class 3b, class 4, and embedded lasers used in clinical(medical/dental/veterinary), research, and teaching applications.

Roles

Laser Safety Officer (LSO) – maintains accurate inventory of all lasers covered by this policy.

Principal investigator/Authorized User/Owner (PI/AU/Owner) – has the following responsibilities

1. Complete a registration form for each class 3b, class 4, and embedded class 3b or 4 laser under his/her control.
2. Inform the LSO within 72 hours of any disposed laser or the arrival of any new laser to campus.
3. Conduct an annual laser inventory review and submit to the LSO.

Department head/manager of the room housing a laser – If a laser does not have an assigned PI/owner, the department head/manager of the space where the laser is housed has the following responsibilities

1. Complete a registration form for each class 3b, class 4, and embedded class 3b or 4 laser under his/her control within seven days of the laser arrival on campus and before being energized.
2. Inform the LSO within 72 hours of any disposed laser or the arrival of any new laser to campus.
3. Conduct an annual laser inventory review and submit to the LSO.

Definitions

Class 3B and class 4 embedded laser – is an enclosed laser that has a higher classification than the laser system in which it is incorporated, where the lower classification system is appropriate because of engineering features limiting accessible emissions. Typically, embedded class 3B and 4 lasers embedded in an engineered enclosure are classified as an embedded Class 1 system. Flow cytometry systems and confocal microscopy systems often contain class 3b or class 4 embedded lasers.

Procedure

I. **The following procedure is required to register a laser.**

A. The PI/AU/owner or the department head/owner of the room housing a laser must complete a **Laser Registration Form** and submit it to the Research Safety Affairs Office by emailing it to radsafety@uthsc.edu.

1. Any new laser subject to this policy must be registered.
2. Any existing laser subject to this policy that is operable must be registered.

B. If the laser will be used in any research activities, the PI must complete and submit an IMEDRIS protocol for the research activity.

C. When the registration is received by Research Safety Affairs, the laser will be added to the campus inventory to Environmental Safety and Health Assistant (EHSA) database.

II. Inventory Confirmation

A. The LSO will conduct an inventory of campus lasers at least annually.

B. The PI/AU/owner or the department head/owner of the room housing a laser must inform the LSO of any new lasers received or the disposal of any lasers on inventory within 72 hours of arrival or disposal.

III. **Documentation**

A. Inventory records will be maintained by the LSO in (EHSA) database.

Penalties/Disciplinary Action for Non-Compliance

License violations are subject to civil penalties up to $5,000 per day per violation. In the event of a threat to public health and safety, the Division has the right to confiscate radiation sources.

References

SA0500 – Laser Safety

The American National Standard for Safe Use of Lasers (2022) ANSI Z136.1

The American National Standard for Safe Use of Lasers in Health Care Facilities (2018) ANSI Z136.3

Responsible Official & Additional Contacts

This Responsible Official and Additional Contacts section contains those who are responsible or share certain policy responsibilities, organized by subject matter, such as monitoring compliance with the policy, providing additional guidance on policy clarifications, organizing policy training, updating the policy, among other tasks.

Subject Matter	Office Name	Telephone Number	Email/Web Address
Policy Clarification and Interpretation	Research Safety Affairs	(901) 448-6114	radsafety@uthsc.edu
Policy Training	Research Safety Affairs	(901) 448-6114	radsafety@uthsc.edu

Related Policies/Guidance Documents