Laser Acquisition, Use, and Disposal—UT Policy

Purchase of lasers through the University’s purchasing system, Point plus, will alert EHS of the laser purchase. The commodity code for lasers and laser components triggers an EHS desktop review of the PO or Bid Request. The LSO or LSM will see the PO or bid request, and can determine if the laser is Class 3B or 4, and if the PI is already an Authorized Laser User (ALU). If the description of the laser or component is inadequate to confirm the hazard and PI of the laser, EHS will contact the requestor to get clarification. Once the laser PI is identified, and the laser class is known, the PO or bid request can be approved. Class 3B or 4 laser POs or bid requests will be saved in the PI’s laser file and a follow-up review will be conducted to determine the status of the laser purchase.

“Laser Products” sold or imported in the US must comply with the 21 CFR subchapter J, and section 1040. The manufacturer is required to comply with these rules, which includes hazard classification, safety features and warning labels. The laser product is sold and shipped with the safety features inbuilt as part of the laser device. Laser products classified as 3B and 4 require additional safety features to operate. Class 1 and 2 lasers are generally not considered hazardous, and class 3a lasers are hazardous only if misused.

Laser components, such as a laser diode, laser excitation media/rod, laser cavity mirrors, etc., are used to build “homemade” or “self-built” lasers. These lasers do not usually meet manufacturing safety requirements such as housing enclosure, interlocks, beam shutter, key controls, aperture warning label, and other requirements. The laser has not undergone the hazard classification process, which categorizes the laser’s hazard level. Rules for use of this type of laser are more complex and could require submitting an official laser product report to the FDA.

Brochures and spec sheets may also be used to obtain beam characteristics, which are needed for the laser hazard analysis. The manufacturer should be able to answer specific questions regarding classification, safety, and laser protective eyewear.

Receipt of a laser at UT places the use of the laser under Texas regulations and UT safety controls. The PI or his designee should contact EHS upon receipt of a Class 3B or Class 4 lasers. Activation of the laser system must be done under the oversight and approval of the Committee and EHS. The State of Texas requires that we keep an updated inventory of Class 3B and Class 4 lasers.

Laser lab setup should be completed with safety considerations in mind. A review of the proposed setup by EHS can prevent difficult changes after the laser setup has been completed. Poor decisions in lab setup do not diminish the PI’s obligation to meet safety requirements. Ask for EHS input for your proposed lab setup.

Use of lasers at UT must follow applicable regulatory requirements and safety policies. The Committee, EHS, the LSO and LSM are charged with review and approval of laser use at the University. The safety requirements for laser use at UT are covered in other program documents.
**Transfer of lasers** to another person or organization must be authorized by EHS. Class 3B and Class 4 lasers cannot be sold, donated, transferred, or relocated to another PI, researcher, facility, or institution without EHS approval, even on a temporary basis. Texas regulations require that the transferor of a laser must demonstrate that the transferee has a current registration with the State of Texas. Lasers transferred out of State may have other requirements. EHS will require the transferee to demonstrate competence in the safe use of class 3B and 4 lasers.

More information on the UT Laser Safety is available here: