

Application for Use of Class IIIB and IV Laser Authorization

Instructions

Class 3b and 4 lasers, laser systems, and embedded lasers (a laser with a higher class than the laser system) must be registered with the Radiation Safety Office. All Authorized Users (AU) must be approved and authorized by the Radiation and Laser Safety Committee prior to using Class 3b and 4 lasers. Additionally, prior approval for procurement and installation of 3b and 4 lasers and laser systems must be obtained from the Radiation Safety Office.

The application involves items that are required to be completed before the application will be presented for the Radiation and Laser Safety Committee's review and approval. Complete this application form and submit to the Radiation Safety Officer (RSO). It is very important for the AU to ensure all required items are addressed to avoid delays; approval for use and request to purchase any additional lasers will not be granted until the application is approved by the Radiation and Laser Safety Committee.

A standard operating procedure (SOP) is required as part of the application process. A facility evaluation will be performed during the application review process to ensure proposed research can be conducted safely. Engineering controls will be evaluated post installation to verify that special safety features for the facility meet current requirements. Training requirements for the AUs and all Laser Users (LU) are part of the application review process and should be completed as early as possible.

Authorization Information (to be completed by the Principal Authorized User)

1. AU/ Supervisor: _____
2. Phone: _____ E-mail: _____
3. Emergency Contact: _____ Phone: _____
4. Department: _____
5. Building/ Office #: _____
6. Lab Location: _____
7. Department Chair: _____
8. Purpose or Intended Use: _____

9. Laser(s) Description: Use additional page if necessary

Manufacturer	
Model	
Serial #	
Laser Class	
Lasing Medium (HeNe, Argon, etc.)	
Wavelength (nm)	
Maximum Power /Energy (W, J, etc.)	
Output Description (CW, pulse, etc.)	
Nominal Hazard Zone	

Manufacturer	
Model	
Serial #	
Laser Class	
Lasing Medium (HeNe, Argon, etc.)	
Wavelength (nm)	
Power (W, J, etc.)	
Output Description (CW, pulse, etc.)	
Nominal Hazard Zone	

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Power (W, J, etc.)	
Output Description (CW, pulse, etc.)	
Nominal Hazard Zone	

10. Laser Control Measures

Access Control/Hazard Warning Signs & Device Labels

- | Yes | No | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Posted entrances (provided by the Radiation Safety Office) |
| <input type="checkbox"/> | <input type="checkbox"/> | Laser access control/device security |
| <input type="checkbox"/> | <input type="checkbox"/> | Control Area (nominal hazard zone) established |
| <input type="checkbox"/> | <input type="checkbox"/> | Warning label on device |
| <input type="checkbox"/> | <input type="checkbox"/> | Laser class label in place |
| <input type="checkbox"/> | <input type="checkbox"/> | Laser hazard label in place |
| <input type="checkbox"/> | <input type="checkbox"/> | Laser aperture label in place |

Administrative Controls

- | Yes | No | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Standard Operating Procedures/Emergency procedures |
| <input type="checkbox"/> | <input type="checkbox"/> | Emergency contacts posted |
| <input type="checkbox"/> | <input type="checkbox"/> | Alignment procedures |
| <input type="checkbox"/> | <input type="checkbox"/> | Personnel authorization |
| <input type="checkbox"/> | <input type="checkbox"/> | Eye protection |
| <input type="checkbox"/> | <input type="checkbox"/> | Skin protection |

Engineering Controls/ Room Design/ Safety Controls

- | Yes | No | |
|--------------------------|--------------------------|------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Enclosed beam |
| <input type="checkbox"/> | <input type="checkbox"/> | Protective housing |
| <input type="checkbox"/> | <input type="checkbox"/> | Protective housing interlock |

- Service panel interlocks
- Door/Laser curtain interlock
- Key/Lock control
- Beam Stop/Attenuator
- Activation warning system/Laser light
- Windows/doorways covered
- Reflective materials removed
- Limited access to spectators/visitors
- Laser secured to table or other work surface
- Beam intensity reduced or filtration in place
- No Laser beam at eye level

Non-Beam Hazards

- | Yes | No | |
|--------------------------|--------------------------|---------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Laser generated airborne contaminants |
| <input type="checkbox"/> | <input type="checkbox"/> | Fire hazard |
| <input type="checkbox"/> | <input type="checkbox"/> | Explosive hazard |
| <input type="checkbox"/> | <input type="checkbox"/> | Compressed gases in use |
| <input type="checkbox"/> | <input type="checkbox"/> | Laser dyes in use |
| <input type="checkbox"/> | <input type="checkbox"/> | Cryogenics in use |

If yes, explain and include safety plans/measures here (use additional sheet as required):

11. Provide the following specific information (use additional sheet as required):

a) Summary of Laser procedures.

b) Procedures for alignment, maintenance, and/or service, including procedures for the bypass of safety interlocks (additional requirements apply for clinical use lasers).

c) Description of planned equipment modifications or updates to the system.

12. Summary of AU's training and experience with lasers including institution, courses taken, duration, etc.

13. Important notes:

- a) Certification of training must be documented for all users to operate or maintain the laser system.

List of Laser Users*:

Name_____	ID _____	Email:_____	Initial_____
Name_____	ID _____	Email:_____	Initial_____
Name_____	ID _____	Email:_____	Initial_____
Name_____	ID _____	Email:_____	Initial_____
Name_____	ID _____	Email:_____	Initial_____

- * Laser Users must have read the Laser Safety Manual and must verify by signing their initials.
- * Laser Users must have received specific laser safety training for laser hazards in their labs from their AU and must verify by signing their initials.
- * Laser Users must have attended and passed the URI Laser Safety Training must verify by signing their initials. (Other Laser Users may be added later by amendment after completing these requirements)

- b) This application is strictly for non-human use only. Laser use on humans under the scope of this authorization is prohibited. (Indicate if clinical use laser is involved)
- c) Any actual or suspected exposure must be reported to the RSO immediately.
- d) Modifications and repairs to laser devices/system that could affect the beam quality (excluding routine beam alignment) must be reported to and receive prior approval from the RSO before the device is put back to use.
- e) Notify the RSO when the status of device is changed from “Active” to “Inactive” and vice versa.
- f) Notify the RSO prior to laboratory close-out, relocation, and/or transfer of laser device to another AU(s), including transfer out of the University, or disposal of a laser. AUs leaving the University must notify the RSO at least 2 weeks prior departure.
- g) Notify the RSO before addition of a Laser User. Privileges of departing Laser Users should be suspended immediately and communicated to the RSO.
- h) It is recommended that a log be maintained to document the specific personnel and date/time that the equipment is being used.

14. Provide a sketch of the room and the proposed location of the laser. Identify the laser control area. Use additional pages if necessary.

CERTIFICATION

I certify that the information contained herein and attached hereto is true and correct to the best of my knowledge.

Date: _____ AU Signature: _____