



LASER Alignment, Maintenance, Service, Repair, Installation Acknowledgement Form

The following guidelines are applicable to all/any manufacturers' representative / **service technician** providing service to laser containing equipment for the NCI at Frederick laboratories. These guidelines are a basic minimum requirement which must be followed for the safe alignment, maintenance, service, repair and installation of lasers, laser systems and laser containing equipment; additional safety considerations may be required. If assistance or information is needed, please contact:

Environment, Health, and Safety (EHS): **301-846-1451**.

The following guidelines are applicable to the performance of tasks related to lasers, laser systems and laser containing equipment, including but not limited to laser alignments, service, maintenance, repairs and installations:

- Manufacturer's representatives must have the experience and safety training commensurate with the class of the laser or laser system they are servicing.
- All laser related tasks must be performed with adherence to American National Standard (ANSI) Z136.1, Z136.8; Occupational Safety Health Administration OSHA Technical Manual and Frederick National Lab for Cancer Research laser safety practices to include but not limited to the following:
 - Display all applicable postings in required locations.
 - Utilize appropriate PPE to include wavelength specific Optical Density eyewear.
 - Prevent accidental exposure to laboratory personnel.
 - Create a temporary controlled laser area (TCLA) with use of barrier materials appropriate to the laser hazard. NOTE: A portable laser barrier is available from EHS.
 - Ensure that no laboratory personnel are present when conducting procedures where exposure to a laser hazard is present.
 - Operate lasers at the lowest power level possible.
 - Use only diffusely reflecting materials and tools in or near the beam path.
 - Upon completion of the task, ensure that all covers, interlocks and shielding have been returned, are secured and correctly functioning.

"Temporary or permanent visual impairment can result when lasers are used without appropriate OD eye protection. Adherence to safety practices can effectively prevent laser-induced ocular injuries. The nature and severity of ocular injury is determined by multiple laser-related and eye-related factors, the most important being the duration and amount of energy delivered and the retinal location of the lesion. The clinical course of significant retinal laser injuries is characterized by sudden loss of vision, sometimes followed by improvement over a few weeks, and occasionally severe late complications. Medical and surgical treatment is limited."

Contact EHS 301.846.1451 **PRIOR** to mobilization.

By signing, I am certifying that work conducted on NCI at Frederick on the date below (if known) will comply with requirements under this document.

Name:	Date:
Company/Job Title:	Signature: