

STANDARD PRACTICE INSTRUCTION**DATE:** _____**SUBJECT:** Safe Use of Lasers Program**REGULATORY STANDARDS:** OSHA - 29 CFR 1926.54, Nonionizing Radiation
21 CFR 1040, FDA Laser Manufacturing Requirements
ANSI - Z136.1, Safe Use of Lasers

BASIS: Lasers emit intense, coherent, electromagnetic radiation that is potentially dangerous to the eye and skin. Other hazards associated with lasers that the laser operator must be cognizant of are electrical, fire, and chemical hazards. The ABC Corporation laser safety program is designed to ensure the safety of all personnel and visitors. It is based on the latest edition of the American National Standards Institute, Inc. (ANSI) Z136.1, "American National Standard For the Safe Use of Lasers," which is the generally accepted safety standard for laser use.

GENERAL: This standard practice instruction on laser safety is intended to provide specific requirements and guidelines based on ANSI Z136.1 to ensure the safety of laser operators and other individuals likely to be exposed to laser hazards. In practice, the hazard classification of a laser is determined, and then the appropriate controls are applied taking into account the laser environment and the potential for excessive personnel exposure. Training and medical surveillance requirements are also included.

OVERALL RESPONSIBILITY: The Laser Safety Officer is _____. S/he is solely responsible for all facets of this program and has full authority to make necessary decisions to ensure success of the program. The Laser Safety Officer is the sole person authorized to amend these instructions and is authorized to halt any operation of the company where there is danger of serious personal injury.

Contents of the Safe Use of Lasers Program

1. Written Program.
2. Program Responsibilities.
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4. Electrical Safety Requirements.
5. Design and Construction Practices.
6. Laser Classifications and Entry Controls.
7. Laser Safe Operating Procedures (LSOPs).
8. Laser Safety Training.
9. Laser Medical Surveillance.
10. Laser Protective Equipment.
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12. Safe Laser Practices.
13. Definitions.
- Appendix 1 - Outline For Laser Safe Operating Procedures.
- Appendix 2 - Authorized Laser Operator.

ABC Corporation Safe Use of Lasers Program

1. Written Program. ABC Corporation will review and evaluate this standard practice instruction on an annual basis, or when changes occur to 29 CFR 1926.54, Nonionizing Radiation and ANSI Z136.1, Safe Use of Lasers, that prompt revision of this document, or when facility operational changes occur that require a revision of this document. Effective implementation requires a written program for job safety and health, that is endorsed and advocated by the highest level of management within this company and that outlines our goals and plans. This written program will be communicated to all required personnel. It is designed to establish clear goals and objectives.

2. Program Responsibilities.

2.1 Department/Project/Division Heads are responsible to ensure that all employees under their direction follow the requirements and procedures in this section.

2.2 Supervisors are responsible for the enforcement of the requirements and procedures of this section. These include:

2.2.1 Assurance that the Laser Safety Officer is notified prior to the acquisition or fabrication of a new laser so that a preliminary safety review can be made.

2.2.2 Assurance that the Laser Safety Officer is notified prior to the initial operation of a new laser or laser facility so that a final safety analysis can be made.

2.2.3 Assigning each individual laser to an individual (called the Principal Authorized Laser Operator) who will be responsible for the safe storage and use of that laser. The Laser Safety Officer must be notified by the supervisor whenever the laser is reassigned to a new Principal Authorized Laser Operator.

2.2.4 Assurance that the laser or laser facility is operated consistently with applicable requirements and safe laser practices, including those specified in Laser Safe Operating Procedures (LSOP), if required.

2.2.5 Assurance that a safety review or analysis by the Laser Safety Officer is made prior to use whenever there is a change in location or conditions (such as modifications) which may affect the safe use of the laser.

2.2.6 Assurance that all laser operators complete laser safety training and medical surveillance requirements before they are authorized to operate any laser.

2.3 Principal Authorized Laser Operators shall ensure that each laser for which they have responsibility is operated safely and in accordance with applicable requirements. These include:

2.3.1 Notifying the Laser Safety Officer of the intent to procure a laser and providing required information for registration and safety reviews for lasers.

2.3.2 Ensuring that each laser is stored securely and safely when not in use so that it is not usable by unauthorized personnel or under unauthorized conditions.

2.3.3 Permitting only authorized laser operators to use the laser.

2.3.4 Providing an approved written LSOP if required, and ensuring that the laser is used only under conditions and in locations that meet the requirements of the LSOP.

2.3.6 Providing laser training specific to the laser for operators, in consultation with the Laser Safety Officer.

2.3.7 Designating the newly trained operator to be an authorized laser operator.

2.4 Authorized Laser Operators shall:

2.4.1 Meet all applicable requirements including those of training and medical surveillance before operating the laser.

2.4.2 Operate lasers safely and in a manner consistent with safe laser practices, requirements, written LSOP (if required), and guidance from the Laser Safety Officer.

2.4.3 The _____ is responsible to coordinate medical requirements in accordance with the medical surveillance program, which specifically includes eye examinations and associated records.

2.4.4 The _____ is responsible for keeping laser safety orientation and training records and for scheduling and coordinating classes.

2.4.5 The _____ is responsible to ensure that all requisitions for purchase of lasers have been approved by the Laser Safety Officer.

2.4.6 The _____ is responsible for ensuring that lasers received are not released until they have been checked and tagged by the Laser Safety Officer.

2.4.7 The Laser Safety Officer (LSO) is responsible for the following:

- Performing preliminary and final safety reviews of lasers and laser systems.
- Determining or verifying laser classifications.
- Assigning identification tags and maintaining a current register of all lasers at ABC Corporation. Laser inventory should be completed on an annual basis.
- Reviewing and approving safe operating procedures.
- Providing laser safety orientation and coordinating laser-specific training, as required.
- Providing Occupational Medicine with a list of laser operators as part of the Medical Surveillance program.
- Advising on laser protective equipment, including eyewear.
- Providing guidance on requirements for laser warning signs.

3. General Safety Requirements.

END OF SAMPLE

**Order this OSHA Safety Plan online at
<http://www.SafetyInstruction.com>
or call toll free 866-598-2128.**

**This plan can be downloaded after you place your
order or sent via UPS hard disk.**