

**OREGON OCCUPATIONAL SAFETY AND HEALTH DIVISION
DEPARTMENT OF CONSUMER AND BUSINESS SERVICES**

PROGRAM DIRECTIVE

Program Directive: A-285
Issued: January 9, 2012

SUBJECT: Laser Inspection Guidelines

**AFFECTED CODES/
DIRECTIVES:**

Division 1 General Administrative Rules, [OAR 437-001-0760](#)
Rules for all Workplaces

Division 4 Agriculture, [OAR 437-004-0099](#) General Standards

[Division 2/I](#) Personal Protective Equipment

[Division 3/E](#) Personal Protective and Life Saving Equipment

[Division 4/I](#) Protective Equipment

[Division 7/D](#) Personal Protective Equipment & Programs

PURPOSE: This directive provides policy guidance affecting the use of Class IIIB and Class IV lasers and enforcement policy related to these laser classifications when used in general industry and construction.

SCOPE: This directive applies to all of Oregon OSHA.

BACKGROUND: The use of lasers in industry is becoming prevalent, and more industries are using lasers. The hazards associated with laser use depend on the class and radiation exposure. Effects can be minimal to the eye(s) or can result in corneal or retinal damage. Biological effects on the skin from laser radiation can vary from a mild reddening (erythema) to blisters and charring. Damage to underlying organs may occur from extremely high-powered laser radiation. Non-beam hazards also exist and include physical, chemical and biological agents that must be assessed.

All lasers that are sold must be rated, as required by the Food and Drug Administration (FDA). The FDA classifies lasers as Class I, Class II, Class IIIA, Class IIIB, and Class IV.

The American National Standards Institute (ANSI) established Z-136.1, *Safe Use of Lasers*. This ANSI standard is the recognized industry standard for the safe use of lasers.

ACTION:

Although Oregon OSHA does not have explicit rules for laser safety, the Oregon Safe Employment Act requires that employers provide a safe and healthful work environment. Due to the seriousness of the hazards posed by certain classes of lasers, as well as lasers used in specific circumstances, Oregon OSHA expects that employers with employees exposed to Class IIIB and Class IV lasers appoint a Laser Safety Officer (LSO) with the following responsibilities:

1. Establish a laser safety program.
2. Classify or verify the classification of all lasers under the LSO's jurisdiction.
3. Conduct a hazard evaluation.
4. Assure all control measures are implemented and followed.
5. Approve operating procedures related to the use of lasers.
6. Recommend and/or approve of PPE for laser exposures.
7. Ensure all employees who use or are exposed to laser hazards are provided with information and training on the safe use of the equipment.
8. Establish procedures for medical surveillance, when necessary.
9. Establish procedures to investigate all incidents with potential or actual employee exposure to laser radiation.

**GENERAL INSPECTION
GUIDELINES:**

Facilities that use Class IIIB or Class IV lasers only within an intact Class I enclosure do not need to establish an LSO, unless their employees must open that enclosure for any reason, or are within the hazard zone when anyone else, such as a contractor, must open the enclosure for any reason.

For citation purposes, the Compliance Safety and Health Officer (CSHO) must establish that employees use or are exposed to a Class IIIB or Class IV laser, and that the employer was or should

have been aware of the need for an LSO. This can be established in discussions with the employer and/or representatives, employee interviews, and documentation supplied by the manufacturer or seller of the equipment.

Where employee exposure and employer knowledge can be established, the CSHO will cite OAR 437-001-0760(6) or OAR 437-004-0099(5), Extraordinary Hazards. PPE-related issues, which will be cited under the applicable PPE requirement, depending on the circumstances.

In situations where employee exposure or employer knowledge cannot be established, the CSHO will send a hazard letter outlining the above-requirements for an LSO and their duties.

**EFFECTIVE
DATE:**

This directive is effective immediately and will remain in effect until cancelled or superseded.