



Laser Safety Protocol # 001

TO: Laser users
FROM: Laser Safety Program
SUBJECT: Applicability of Control Measures
VERSION DATE: MAY 2008

Goal

Documentation of the LBNL standard protocol for Applicability of Control Measures, in such cases where more than one control measure accomplishes the same purpose the LSO shall select the most appropriate control(s) and document in the specific AHD.

Protocol

The Laser Safety Program at LBNL will in such cases where more than one control measure accomplishes the same purpose the LSO shall select the most appropriate control(s) and document in the specific AHD.

Applicable Standard and Policies

ANSI Z136.1 / CDRH Specification

The ANSI Z136.1 standard for the safe use of lasers is the Laser Safety Program's general guidance document.

The CDRH is the Food and Drug Administration's body tasked with developing laser-light-product performance safety standards for lasers sold in the United States.

LBNL PUB-3000, Chapter 16 (Lasers), also guides laser use at LBNL.

ANSI Z136.1-2000

Section 4.1.1 Applicability of Control Measures. States

"The purpose of control measures is to reduce the possibility of human exposure to hazardous laser radiation and to associated hazards. In some cases, more than one control measure may be specified in different sections of this standard that are designed to reduce the possible exposure to a level at or below the applicable MPE. In such cases, more than one control measure which accomplishes the same purpose shall not be required". This statement is repeated in ANSI Z136.1-2007.

Rationale

When deciding on the applicability of ANSI controls, the LBNL LSO considers its safety implications and engineering feasibility.

Through out the ANSI Z136.1-2000 standard the following or similar statement can be found (Section 1.3.1, 1.3.2.3, 4.2):

Section 4.1 Control measures shall be devised to reduce the possibility of

exposure of the eye and skin to hazardous levels of laser radiation and other hazardous associated with laser devices during operation and maintenance. The LSO shall have the authority to monitor and enforce the control of laser hazards and effect knowledgeable evaluation and control of laser hazards.

Section 1.3.2.3 states as a shall avoiding unnecessary or duplicate controls.

The LBNL Laboratory Laser Safety Officer has the responsibility, training and knowledge to perform this task. Since the standard does not support repetitive controls each Class 3B and Class 4 laser system will be reviewed and only the controls deem appropriate for user safety in our unique research environment t will be required and documented in the users AHD.

Contact Information

In case of questions or comments, contact Ken Barat, Laser Safety Officer (LSO), at ext. 2544, kbarat@lbl.gov.