

Meeting 7/20/06 SRC Subcommittee on Laser Safety

Present:

Larry McLouth (EHS), Ken Barat (LBNL), Joel Ager (MSD), Robert Schoenlein (MSD), Eddie Ciprazo (UCB), Richard Kadel (PHNRD), Marc Hertlein (CSD), Neil Landau (BSO).

Agenda:

- (1) update on BSO action items (Larry)
- (2) discussion of incorporating EH&S class 289 into EH&S 280 and how to handle EH&S 287
 - 280 is the laser safety class
 - 289 is the laser safety refresher (lectures given in Spring 2005)
 - 287 is the alignment observation of new users by the LSO
- (3) plans for incorporating light hazard tables into AHDs and for availability in laser labs (Larry)
 - (1) recent activities of Laser Safety committee (Bob)
- (5) discussion of MSD laser safety report (Bob, Larry)

Minutes:

(1) Larry reported that 43 out of 58 walkthroughs of the laser labs are done. Walkthroughs include verifying the contents of the laser inventory database (accountable to DOE only for laser-identifying information), checking interlocks, existence of eyewear etc.

Target completion date for the walkthroughs has been moved up to Aug. 30

Standardized laser interlock – DOE Action Item: Interlocks from three vendors were evaluated – (a) Rockwell Intl., (b) Kentech, and (c) LBNL-built. Interlocks from (b) and (c) appeared to be best. LBNL-Facilities did design drawings of the proper installation, and these drawings will reside with LBNL-Facilities. I was suggested that the installation drawings/details be presented to the Laser Safety Committee for comment. This action item is also due to DOE-BSO by Aug. 30.

(2) Laser training:

Ken Barat proposed combining EH&S-289 (laser awareness video/slides) with EH&S-280 (primary laser training class). All agreed on this. It was suggested to incorporate EH&S-289 into EH&S-281 (laser training refresher) as well. People who have not yet taken EH&S-289 will need to be identified. Ken suggested giving EH&S-289 credit to everyone who has taken EH&S-280 since June 2006 (since effectively EH&S-289 materials have been included). All agreed on this.

Ken Barat pointed out that the course description for EH&S-287 (laser alignment observation) is problematic and will propose a re-write of the Pub 3000 section dealing with this. The description of EH&S-287 in Pub. 3000 differs considerably from the original proposal considered by the Laser Safety Subcommittee in July 2005 (see minutes).

(3) Light Hazard Tables:

Larry reported that the Light Hazard Tables will be generated by the LSO for inclusion in the AHD. Bob expressed concern about this since the essential data for generating this table (laser parameters: energy, wavelength, pulse duration, spot size etc.) must come from the laser user. Currently there is no clear request to the laser users to provide this information. In the present AHD, such information is only provided for the "laser" output. Similar light hazard parameters from other devices (amplifiers, nonlinear optical processes etc.) are not clearly requested from the users as part of preparing the AHD. It was suggested that something similar to the original example Light Hazard Table (recommended by the Laser Safety Committee in Jan. 2006) be included in each AHD, and be filled out by the laser users. Further information (MPE, NHZ etc.) could then be calculated from this by the LSO.

Questions were also raised about the policy on checking laser interlocks. Larry indicated that interlock checks are the responsibility of the laser user. Present policy is for the user to fill out a standard interlock test form during lab inspection. This form will then be scanned into the database and attached to the AHD as a .pdf file.