

Meeting 11/16/06 SRC Subcommittee on Laser Safety

Present:

Ken Barat (EH&S), Larry McLouth (EH&S), Eddie Ciprazo (UCB), Joel Ager (MSD), Richard Kadel (PHNRD), Xianglei Mao (EETD), Robert Schoenlein (MSD), Neil Landau (BSO), Rick Kelly (MSD Safety Coordinator).

Agenda:

- (1) policy on laser eyewear for protection at all wavelengths (Ken, Rick Kelly, Larry)
- (2) update on verification of action items and visit by Russ Kelly (Larry, Ken)
- (3) update on laser eye exam policy (Ken)
- (4) update on laser safety protocols and revision to Pub 3000 (Ken)
- (5) discussion of proposed changes to the Laser Management System (laser inventory) (Larry)

Minutes

(1) The issue of including safe exposure times in the light hazard table was discussed. This is particularly relevant for UV exposure. Acceptable exposure times vary widely, and depend on the particular circumstances (e.g. ANSI indicates 8 hrs., LLNL uses a 600 sec. limit). Ken Barat proposed to re-write the light hazard table to include safe exposure times for given eyewear and beam conditions. Laser users can define an appropriate time frame for exposure, but this must be justified, evaluated by the LSO, and clearly explained in the AHD.

Rick Kelly discussed the related issue of eyewear for multiple-wavelength exposure, and raised the concern that Pub 3000 does not clearly define what constitutes acceptable protective eyewear. It was proposed that Pub 3000 be amended to require that eyewear attenuate to below Class IIIb level unless specified otherwise in the AHD. Depending on conditions, the MPE may be used as the relevant figure of merit for eyewear attenuation, or 'alignment' eyewear may be used in some instances, but this must be clearly described in the AHD.

(2) Larry reported that there were no 'findings' from the recent visit by Russ Kelly (DOE Oak-Ridge Site Office). Russ will recommend that laser lab inspections be called out in Pub 3000, and that the annual visit by the LSO for AHD renewal be included as well.

*Note: subsequent to the meeting, it was clarified that there is no LBNL requirement for an **annual** LSO visit to a laser lab for AHD renewal. The present policy is that laser AHDs may be automatically renewed annually for up to three years, if the PI verifies that there are no changes in hazards. All laser AHDs will undergo a complete review/ renewal (including LSO visit) at least every three years, regardless of whether there are changes in the hazards or not.*

- (3) Pub 3000 Ch. 3 will go forward to the SRC as it stands (with the restrictive language regarding laser eye exams). Dr. Lichty will revise this in February 2007, and changes will be made simultaneously to both chapters (3 and 16).
- (4) Ken will write up some protocols (e.g. Nominal Hazard Zone definition, unattended laser operation policy, warning signs etc.). An approval process for these protocols needs to be identified and described in Pub 3000.
- (5) Changes to the Light Hazard Table and Laser Inventory (and AHD template) will be done simultaneously, at some point in the future.