12/15/09 Minutes for the SRC Subcommittee on Laser Safety

Present: Ken Barat (EH&S), Joel Ager (MSD), Jerry Bucher (CSD), John Byrd (AFRD), Eddie Ciprazo (UCB), Joe Dionne (PBD), David Littlejohn (EETD), Xianglei Mao (EETD), Ben Sandmann (PBD), Junko Yano (PBD)

Agenda:
(1) SLAC accident review
(2) Discussion of generic restart plan
(3) Laser hazard awareness chart development
(4) Emergency shut down procedure
(5) Laser interlock bypass issues at Sandia
(6) Viewing cards for 800 nm / NIR beams

Minutes

1. Ken Barat gave an update of the restart process for laser labs at SLAC following the laser accident earlier in the year. 15 of the 19 laser labs are operational again.

2. Since Ken was part of the review team for the laser accident at SLAC, he thought it would be useful for the committee to discuss the development of a generic restart plan for laser labs in the unlikely event of a laser accident. LBNL has in excess of 60 laser labs, and it might be useful to have a structured approach that has undergone some review. There was some discussion on how restart processes have proceeded at other labs following an accident. The committee will continue to discuss the concept at the next meeting.

3. Ken has received some input from committee members on potential hazards associated with components of laser systems. He is in the process of developing a laser hazard awareness chart that can be distributed to laser users. Newport Corporation has indicated an interest in giving a presentation on the use of laser system components at LBNL, and Ken will work on scheduling a presentation early next year. He will look into the possibility of recording the presentation for use as part of laser safety training.

4. The power outage at LBNL yesterday prompted discussion of the need for an emergency shut down procedure for laser labs. Following some discussion, the committee decided that the significant hazards were not laser-specific, and outside of its purview.

5. Ken reported on an issue discovered during repair of a laser welding system at Sandia. The interlock bypass used during the repair was not removed at the completion of service, and the bypass was not immediately discovered. This is a reminder to check that the laser system is fully functional following repair or modification.

6. Ken showed inexpensive index cards with fluorescent dyes (such as Oxford Assorted Glow Colors) can be used for 800 nm / NIR beam alignment. They are useful as long as users are aware of their limitations.