

Agenda for Laser safety committee meeting Sept 17, 2013, 3pm

- LOTO statement:

Mark Scott gave a presentation during our last meeting on June 27, and asked us to think about how LOTO should be handled with respect to lasers at LBL. Remember that lasers are generally not exempt from LOTO, so we should have guidelines on when and how LOTO gets implemented.

I am proposing that the LSC make a recommendation that the laser safety officers should make the determination on a case by case basis when LOTO is needed for a particular laser setup.

The previous meeting minutes are here:

<http://www.lbl.gov/ehs/sac/subcomms/lasersafety/minutes/minutes.shtml>

- report from the laser safety meeting: Greta and Bob
 - Greta's report on the gap analysis at LBL: The gap analysis is an effort at LBL to identify differences (or deficiencies) between ANSI and other regulatory requirements and their implementation here our program, to verify compliance.
 - plans for the laser vendor fair on October 15
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LSC meeting minutes June 27, 2013

Present: Quang Le, Jerry Bucher, Eddie Ciprazo, Martin Neitzel, Marc Hertlein, Xianglei Mao, Mike Carr, David Kestell, Greta Toncheva, Bob Fairchild. Calling in via phone: Joel Ager

LOTO recommendation

Mark Scott gave a presentation during our last meeting on June 27, and asked us to think about how LOTO should be handled with respect to lasers at LBL. Lasers are not generally exempt from LOTO, and Mark asked us during that meeting to think about how LOTO should get applied to lasers.

Marc Hertlein proposed that the laser safety committee make a recommendation on how to determine in which cases LOTO is necessary for a laser safety setup. The recommendation would be to delegate decision authority to the LSOs on whether LOTO is necessary for a particular setup.

One comment in the meeting was that the recommendation should focus on the laser hazard aspect; other hazards such as electrical safety are already addressed by existing LOTO requirements.

Report from the laser safety meeting

Bob and Greta attended the *9th Annual DOE Laser Safety Officer Workshop* in Boulder Co. (Sept 10 – 12); Bob gave an overview of some topics discussed there.

Several of the presentations are available at the conference web site:

<http://www-conf.slac.stanford.edu/lso/2013-ProgramAgenda.htm>

Two highlights that Bob reported on:

- Laser companies are now starting to sell supercontinuum fiber lasers with, with output simultaneously covering all wavelengths from the near UV to the IR (400nm-2500nm), and total output power around 2 Watt, typically pulsed at kHz-MHz rep rates. Research versions already reach >10 Watt output power over the full spectrum. Working with these lasers safely will become a challenge since currently available eyewear is not sufficient protection when all visible wavelengths are present.
- A new draft of the section 136.8, *Laser Safety in the Research, Development and Testing Environment*, which is a section of the ANSI standard for the Safe Use of Lasers, was presented at the meeting. Its development is headed by Ken Barat, the former LSO at LBL. The intent for this section is to create guidelines for the use laser systems which do not easily fit into the ANSI 136.1 parent document; an example would be addressing the use of OEM or non-certified (e.g. home-built) lasers which may not have built-in safety systems or standard labeling.

The presentation of the document was met with a lot of discussion, and further work will have to be done to address concerns that were brought up. One complicating factor is that a new version of the 136.1 parent document is expected to come out in 2014, which may affect the 136.8 section.

Gap analysis

Greta presented the results of the LBL Laser Safety Program Gap Analysis. The purpose of this analysis was to evaluate the current LBL laser safety program for compliance with the ANSI Z136.1 laser standard, identify any gaps in compliance, and make a plan for addressing any issues. Greta's powerpoint presentation will be attached to the meeting minutes.

Greta's finding is that overall the laser safety program is compliant, but several program areas need strengthening. The weaknesses that were identified will be addressed within approximately the next 15 months.

Laser vendor fair coming up October 15th 2013

Bob is preparing for the LBL laser vendor fair Oct 15, 2013, 3pm-5pm at the LBL cafeteria. 15 companies are currently planning to attend.