

Agenda for Laser safety committee meeting June 27, 2013, 1pm

- Presentation on LBL lock out tag out (LOTO) program
Mark Scott from EHSS will give a presentation on the LBL LOTO program, and how it may affect lasers at LBL.
 - LOTO discussion
Some of the other National Laboratories explicitly apply LOTO to lasers or laser energy, others, including LBL, currently do not. However policies and requirements vary across the labs; those policies are being reviewed for LBL.
 - Update on the hands-on alignment training (Bob Fairchild)
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LSC meeting minutes June 27, 2013

Present: Greta Toncheva, Bob Fairchild, Mark Scott (EHS), Jerry Bucher, Martin Neitzel, Quang Le, Mike Carr, Marc Hertlein

LOTO presentation:

Mark Scott, the subject matter contact for Electrical Safety in EHS, gave a presentation on changes in the lock-out-tag-out program at LBL. This may affect laser safety as well.

Mark mentioned that the laser program is not exempt from LOTO. However the laser program can (and needs to) determine how, where, and in what circumstances LOTO will need to be applied to lasers.

Here are some relevant points from Marks talk:

- the LOTO chapter of Pub 3000 (Chapter 18) is in the process of being updated/rewritten. The rollout for the new program is next fiscal year (Oct 2013 - Sept 2014).
- Some changes include:
 - More clarity in rules
 - Emphasis on an "assigned person in charge"
 - necessity for written lockout procedures

- changed permit process for vendors
- Interlocks are not sufficient for providing safety during LOTO for maintenance or deenergized work. LOTO must lock out the energy source.

(Mark's presentation will be attached to these minutes.)

LOTO Discussion:

- Greta handed out a LOTO benchmark summary.
The list shows which national labs apply LOTO to laser energy, and how it is implemented if they do. (Handout is attached to these minutes). This varies widely between the labs.

Points that came up in questions during the talk:

- Mark does not want to impose new standards in laser safety, He rather is asking the program to think about LOTO, and find levels or conditions which would trigger LOTO in laser safety. Ideally these guidelines should be included in the Pub 3000 Laser chapter.
- LOTO is a way to control hazardous energy, in the most general sense.
- LOTO distinguishes between energized work, and diagnostic and repair work, with different lockout requirements. How does can/should this distinction apply in laser work ?
- Here are some examples, mentioned during discussion in the room, which could potentially trigger LOTO, or alternatively evaluation for LOTO:
 - accessible laser beams with very high injury potential (e.g. many kW output power)
 - laser beams with the potential of producing accessible ionizing radiation (this would also involve rad safety of course)
 - situations where a laser beam could pass from one room or enclosed area to another
- LOTO is very well suited for dealing with localized or concentrated hazards. It is somewhat less well suited for dealing with area hazards.
- Many of the standard single-room, low to medium power, laser implementations may end up not needing LOTO. However more complex setups or higher power lasers may, or may in the future. The laser program may need some formal guidelines as to how and when to make the determination whether LOTO is required. (Greta and Bob were asked to look into that)
- LOTO does not apply to the Radiation Safety. That program has its own set of safety standards and procedures which differ from LOTO; the reason is partly historical.

Other:

- Jerry Bucher handed out an example job hazard analysis form that is used in his lab. This procedure is approved to be done without LOTO. The procedure describes changing flashlamps in a laser, which may pose an electrical hazard due to potential stored energy in capacitors.

Update on laser hands-on course

Bob Fairchild is working on developing the laser hands-on training course (EHS-304). This is the voluntary introductory course for new laser users (whose development was originally started by Ken Barat with help from Steve Fournier formerly with at BELLA).

Bob handed out a first overview of the course, which includes background information and course objective. (This information was requested during the last LSC meeting)