

**APS Laser Safety Committee Meeting**  
**July 29<sup>th</sup> 2005 10:00 AM, Room B1209**

**Present:**

Dale Brewster	(PNC/XOR)
Elroy Chang	(AOD/ADM)
David Gosztola	(CHM)
Ralph Hinterman	(EQO/IH)
Eric Landahl	(MHATT/XOR)
Yuelin Li	(ASD/PHY)
Yue Meng	(HP-CAT)
Bruce Murdoch	(EQO/IH)
Reinhard Pahl	(BioCars-CAT)

**Minutes**

The third APS Laser Safety Committee meeting was called at the request of Yuelin Li (chairman) to review and edit an on-the-job training (OJT) checklist for laser alignments (class 3b & 4). Reinhard Pahl generated a two page document that incorporates basic laser safety and laser alignment safety. Yuelin Li, Elroy Chang, and Jim Lang provided commentary and revision of the document prior to presentation to the committee. Initial references to develop the OJT checklist were from the ANL Chemistry Division laser safety checklist, ANSI Z-136.1 (2000) Safe Use of Lasers, and the ANL ESH manual.

The meeting began with Bruce Murdoch describing how the OJT training would have TMS (training management system) tracking and crediting of course completion. David Gosztola questioned if the form would be submitted to the LCA Supervisor or ANL-LSO. Reinhard Pahl thought that the OJT checklist did not provide enough laser safety criteria. Elroy reminded the committee that the DOE Order is for OJT of alignment safety for class 3b and 4 laser installations. At the APS, authorized alignment personnel are limited to a few people per LCA. The OJT training requirement is for personnel performing laser alignments on class 3b or 4 laser systems. Ralph Hinterman stated that the checklist would be utilized to analyze laser safety hazards beyond the laser SOP and to determine competency and understanding for safe laser alignments. Murdoch further stressed that the OJT checklist is to give extra scrutiny towards the greatest hazard in laser safety - alignments. Dale Brewster said the best way to ensure laser safety with regard to alignments is to restrict access. Yue Meng stated that accidents happen due to the temperament of an individual. She eliminates hazards inherent in laser operations by engineering class 1 laser enclosures for her systems. Eric Landahl stated that the LCA Supervisor should also be present at the initial stages of laser set-up and operation to foster safe operation by laser users.

David Gosztola, chairman of the Chemistry Division Laser Safety Committee has been tasked with turning the checklist into a practical example by using criteria from his own Laser Controlled Area (LCA). This has been accomplished on 8-5-05. (Attachment)

Reinhard Pahl has submitted revision 2 of laser alignment OJT check list on 8-9-05. (Attachment)

Yue Meng will submit a HP-CAT laser safety regulations form that acts as an agreement between the laser user and LCA Supervisor to fulfill laser safety requirements and institutional rules. This has been accomplished on 8-4-05. (Attachment)

Old Business: Follow Up

Reminder: ANL LSO to follow up on: Medical Department laser eye examination database

The Medical Eye Examination database has not been implemented at ANL. There is discussion of whether the baseline laser eye examination would be required for contractors and users. The Medical Department is working on software to interface with the training management system. A projection for implementation of the laser eye examination database is for the end of the year.

Proposed Features of Database:

- Medical Department would perform data entry
- Users could view whether a laser user had an eye exam via TMS
- A training course number will assigned
- The system is expected to be available by end of '05
- Bruce Murdoch to provide reports on the status of this program