

Lesson Learned Briefing

No.: LL11-0005

Title: Unescorted Entry into a Class 4 Laser Lab

Event: LBNL Event

Event Date: 12/10/2010

Category: ES&H - Laser Safety

Lesson Learned Statement:

Confusion between entering an active class 4 laser laboratory (lab) with an escort for work versus non-work (and when safety rules apply) led to a violation of Class 4 lab protocol. An escort is required when any unauthorized personnel is entering a lab to work or to just look around.

Discussion:

Event:

On Dec. 10, 2010, a LBNL Electrician entered an active class 4 laser laboratory without an escort. The lasers were in a warm up mode hence the laser beams were contained by shutters and enclosures. The electrician was wearing laser protective eyewear when he entered the lab to drop off his tools.

Background

A few days before the event, the electrician had been escorted through the lab to see the site and determine the nature of the work to be performed. At that time, he was instructed that he could not work in the lab without being escorted. Also, he observed the room access code being entered (a code he had seen used in other labs).

Around 8 AM on the morning of Dec 10th, finding no one at the lab, the electrician took it upon himself to enter the code and enter past a laser curtain barrier to drop off his tools. Once that act was completed, he left the lab to find an escort before starting work. His actions violated the access control protocol for laser labs.

A number of critical items arise from this incident. Foremost to the laser safety program is the apparent confusion between the concept of work versus non-work and when safety rules apply. No matter his rationale for entry, the

electrician's entry was a violation of Class 4 lab protocol. He was not given the access code for this lab or given instruction on when he could use the code. As far as access control in laser and radiation areas exists, there is no distinction between when someone can enter a lab to work versus to just look around. Access controls are there for a reason: to keep the non-escorted, non-user out.

The work order for the job, the supervisor's lack of job coordination / orientation, and the electrician Job Hazard Analysis (JHA) did not give any guidance on the level of hazard or appropriate controls to adhere to in a laser lab. Hence, the electrician had no fore knowledge of restrictions and hazards for laser-use areas. Lastly, user instructions and door signage were not as emphatic as they could be on the point of absolute no access without an escort.

This has been an issue at other DOE labs in the past where craft personnel have taken a work order or master key as authority to access a restricted area.

Corrective actions

- Laser lab safety information will be improved on the work permit and craft JHAs
- Laser hazard awareness will be developed and delivered to Facility Division staff
- Clearly explain the distinction between work and non-work to all applicable staff
- Implementing Card Key Access control for all class 3B & class 4 laser labs has been recommend to the Operations Division

Priority Boxes: ORPS Reportable OSHA Recordable PAAA Other

ISM Code:

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