B88 Safety Committee Minutes

Building 88, Commons, 23 May 2006, 1:30PM

Present: Dennis Collins Paul Fallon Jeff Bramble Jim Morel Larry Phair Jim Rice Robert Shannon Linnea Wahl Ken Gregorich Absent: Claude Lyneis Peggy McMahan Paul Vetter Rod Clark Frank Rosado

No minutes from Jan '06 meeting (Sect'y absent)

1. Paul Fallon reviewed the NSD 2006 annual walk-around findings in general. Some of the offices of B88 have been inspected. Paul handed out a building map, asking people to identify their spaces in need of review, and to schedule a review, then advise Paul by week's end of the areas they intend to cover. Areas not assigned will be then assigned for an inspection. Paul provided a general check sheet listing frequent "findings" topics for use as a starting point. A common chronic seismic problem occurs when cabinets and bookshelves are moved, but are not promptly re-anchored. This is a moving target; nevertheless James Symons has requested, and Claude Lyneis has agreed, that we develop and execute a bldg-88 wide plan to anchor cabinets. Paul F. will compile a list of office areas containing cabinets to be braced. Bob Shannon will assign a mech tech to anchor cabinets as he learns of them.

2. Paul Fallon reported that there will be an upcoming audit of laboratory SAA's. He provided a current list of Building 88 SAA's and an SAA inspection checklist, and asked that people make sure their SAA;s are in order within the next few days. Mark Lasartemay (our EHS waste generator contact) has offered to help with any questions. If you require help, please contact Mark.

3. Paul reviewed the LCATs backlog. We're clearing the list, and many items have been corrected but not cleared from the LCATs listings. Paul asked that if anyone is aware that any of these findings have been corrected, they let us know so we can clear it off the LCAT's list of open items. If a correction item is in a committee member's area of work, then that person should make every effort to implement the correction. Let Paul know if you are unable to correct a finding in your group's work area.

4. Waste Stream Analysis has been added to the process of technical safety reviews, so any new experiments will address this topic. Paul asks that we consider, and document, any cases where we have been able to minimize waste stream generation over the last year. One example within that period is that of using less floor paper when doing deflector maintenance for the cyclotron. This reduces the amount of paper used, but the greatest impact is the reduction of mixed waste volume leaving the Cyclotron. Other examples are welcome: please send to Paul.

5. Paul asks that we get in the habit of documenting any on-the-job training, listing the topic, people trained, and the dates of the training. We have done lots of OJT, but little is documented. Please send documentation of OJT to Paul.

6. Larry Phair described some changes being incorporated into the experiment tracking forms. These require study of the experiment by a neutral experimenter for the effects of beam energy, beam intensity, and ion species interaction with the target, surrounding materials, and beam line components before an experiment is authorized to run. Further, a narrative description of the experiment, to assist in quickly assessing the hazards, is to be attached to the tracking form to create a tracking package, describing the experiment and the limits, the hazards, and the mitigating measures required to run safely.

7. We occasionally run experiments for researchers from other LBNL Divisions such as Physics, AFRD, etc., usually on an informal basis. The formality of the experiment tracking system will need to be applied to these experiments as well, since the hazards are often the same, but the researcher is not necessarily familiar with day-to-day Cyclotron safety requirements. More advance notice will probably be one of the most important requirements. The tracking form process will need to start earlier than has been done in the past.

8. Incident notifications. Even when an incident with safety implications, such as a water leak, do not require DOE notification, there may be conditions or consequences that should be brought to the attention of other 88 people. There was some discussion about criteria that would make it clear when others at B88 should be notified. Objective criteria will be hard to create: personal evaluation is necessary. In general, finding an unexpected hazard, or combination of hazards, would require notifying the cyclotron operator who would then notify, at a minimum, the following list of people:

Claude Lyneis Dennis Collins Paul Fallon Larry Phair Jim Morel Jim Rice (B88 Emergency Team Leader)

9. Light Ion Runs: Jim Morel reminded us that light ion runs have been scheduled shortly before scheduled deflector maintenance, causing unnecessarily high levels of beta and gamma radiation during deflector repairs. Under ALARA considerations, it has been our practice to avoid such runs for a period of 4 to 8 weeks before known, scheduled, deflector maintenance. This awareness has been fading. Peggy to be reminded to not schedule light ion runs during the 4+ weeks ahead of shutdowns where deflector work is known to be required.

10. Dennis Collins provided a checklist of suggested electrical safety topics to cover with incoming students, as the flow of new students into B88 is about to begin. Dennis suggests researchers edit the list, and add to the list any hazards their students will need to be aware of, including non-electrical. Jeff Bramble wanted emphasis on the requirements for use of radiation sources, a common problem, to be covered in the students' introduction to work at LBNL.

11. Dennis Collins discussed some of the arc-blast hazards, and safe work practices, when operating circuit breakers or fused switches for experimental equipment. Almost every circuit breaker, during operation, is a risk hazard level 0, requiring PPE. A "0" does not mean no hazard, but represents a hazard level, under NFPA-70E, on a spectrum of -1 through o and up to 4). Fortunately, the PPE is the same in the most familiar cases of operating circuit breakers (600 volts and below). PPE must be:

Non-melting, long sleeved shirt Long pants, Safety glasses.

A handout, also describing essential PPE, was provided with guidelines for safe operation of these devices.

12. RWA-5027, to cover Cyclotron deflector. resonator tank, and inflector work has been signed by all parties and is ready to return to EH&S.

13. Dennis Collins advised the Committee that there was an error in Pub 3000 related to LN handling. Now, when dispensing LN from a pressurized dewar, or an LN transfer line, a face shield must be worn, in addition to safety glasses or goggles.

14. Lead Bricks. Dennis Collins has counted more than 600 lead bricks in B88. While many are part of a relatively permanent assembly (IRIS, for example). Most are simply loose bricks. Some have visible sulfides or oxidation on the surface, and should be cleaned: EH&S has a portable hood, and laborers, for cleaning lead bricks in bad condition. Jim Rice has a supply of thin, strong Mylar tape in various widths to cover the cleaned bricks, making it safer to handle them without PPE, and allowing safe movement of more than five bricks a day.

Minutes by:

Dennis G. Collins MS 88R0192, LBNL

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