

Safety Review Committee
 May 16, 2008
 10:00 AM – 12:00 PM

Minutes

Committee Member	Representing	Present
Banda, Michael J.	Computing Sciences Directorate	X
Bello, Madelyn	Human Resources Advisor	
Blodgett, Paul M.	Environment, Health and Safety Division	X
Dubon, Oscar	Materials Sciences Division	X
Francino Puget, Maria Pilar	Genomics Division	X
Kadel, Richard W.	Physics Division	X
Leitner, Daniela	Nuclear Science Division	X
Li, Derun	Accelerator & Fusion Research Division	X
Lucas, Donald	Environmental Energy Technologies Division	
Lukens Jr., Wayne W.	Chemical Sciences Division	X
Martin, Michael C.	Advanced Light Source Division	X
Nakagawa, Seiji	Earth Sciences Division	X
Ohearn, Jerry	Facilities Division	X
Smith, Linda K.	Information Technology Division	X
Taylor, Scott E.	Life Sciences Division	X
Thomas, Patricia M.	Safety Review Committee Secretary	X
Twohey, Daniel	Directorate/Operations	
Wong, Weyland	Engineering Division	X

Others Present: Richard DeBusk, Michelle Flynn, Melanie Gravois, Howard Hatayama, Peter Lichty, Tony Linard, Janice Sexson, Bill Wells, Mike Wisherop

Chairman's Comments – Michael Banda for Don Lucas

The minutes from the March 2008 meeting were approved.

The proposed MESH Review teams for 2008 are:

- **Directorate Operations** (continued from 2007): Michael Banda (Team Leader), Weyland Wong, Oscar Dubon; DOE observer: Mary Gross; Facilitator: Richard DeBusk;
- **Earth Sciences:** Weyland Wong (Team Leader), Robert KostECKI, Jerry Ohearn; DOE observer: Kim Abbott;
- **Accelerator & Fusion Research:** Scott Taylor (Team Leader), Dan Twohey, Paul Blodgett; DOE observer: Neil Landau;
- **Genomics:** Seiji Nakagawa (Team Leader), Richard Kadel, Linda Smith; DOE observer: Hattie Carwell;
- **Computing Sciences:** Oscar Dubon (Team Leader), Maria P. F. Puget, Daniela Leitner; DOE observer: Kim Abbott.

David Stein will be providing administrative support and assistance in scheduling meetings. Melanie Gravois will be providing technical support. Don Lucas will be presenting further guidance to MESH teams at the June SRC meeting. No objections to the proposed MESH assignments were raised at the meeting. Any team members who anticipate serious scheduling conflicts that would prevent them from fulfilling their MESH assignment should contact Don Lucas or Pat Thomas as soon as possible.

EHS 344 Safe Handling of Engineered Nanoscale Particulate Matter – Larry McLouth

EHS Division proposed a new online training course to cover the hazards and controls for working with nanomaterials. The course contains 24 slides and 13 exam questions. It takes about 20 minutes or less for the typical person to complete. The course content is based on an existing Materials Sciences Division course (MSD 11). The content has been reviewed and vetted by researchers, and it is ready to go into production. The 30 people who have already taken the MSD course will be given credit for EHS 344.

DOE policy statement 460.1 directs laboratories to incorporate the best current knowledge into our controls for nanomaterials. The DOE Nanoscale Science Research Center (NSRC) guidance document “Approach to Nanoscale Safety” identifies specific training elements, which have been incorporated into the course. LBNL participates in the NSRC, which is made up of representatives from all the nanotechnology centers. John Seabury is the LBNL representative. LBNL has submitted a nanoscale safety plan to DOE. Some of the elements have not been implemented yet, such as providing HEPA filtration on all fume hoods where nanomaterials are handled. There will be a DOE review in June, looking at how LBNL integrates nanomaterials safety into Integrated Safety Management. Carolyn Bertozzi and Paul Alivisatos will be giving presentations to DOE.

The EHS 344 course will be required for people who work with engineered particles from 1 –100 nanometers in diameter that have novel properties due to their size. Biological substances are excluded. The need for the training will be identified through the Job Hazards Questionnaire or Job Hazards Analysis process. The introduction of this new requirement will be announced through a Today at Berkeley Lab article.

EHS Division requested SRC concurrence to proceed with posting the course on the EH&S Training website. All SRC members present indicated their concurrence with the new training requirement, with no objectors.

PUB-3000 Changes Approved by SRC Chair – Bill Wells

Bill Wells described some recent minor changes to PUB-3000 approved by Don Lucas, including:

- The list of responsibilities for the Associate Lab Director for Operations/Chief Operating Officer was updated to make it consistent with the SRC Charter.

- The Authority Having Jurisdiction responsibilities for electrical safety, fire safety, life safety, and laser safety were defined.
- Chapter 23.5 now requires posting of entrances of seismically poor and very poor buildings. The Building Managers do the posting.

PUB-3000, Chapter 25 – Machine Safeguarding – Shop and Lab Machine Safety -- Mike Wisherop

Mike Wisherop described changes made to the draft Chapter 25 in response to comments. Several changes were made to ensure that the scope of the chapter includes machines in locations other than shops, and people who perform maintenance on machines.

Section 25.3 defines “machine tool”, “machine equipment” and “power tools”. There was a suggestion that the words “table-top” be removed from the description of machine equipment because some applicable laboratory equipment is larger than tabletop size. There was a request that the terms “qualified” and “authorized person be defined, either in this chapter or in PUB-3000, Chapter 1. HVAC equipment is included. There are no exclusions for particular types of equipment in the OSHA general industry regulations.

Section 25.4 Overview describes how work authorizations are required according to the level of hazard. Machine guarding does not trigger an Activity Hazard Document requirement; however, if the other hazards of the equipment/operation require an AHD, the machine guarding controls and use authorization may be included in the AHD.

Section 25.6 and 25.6.1 describes how the Job Hazards Analysis can be used as training and authorization documentation. There is a skills checklist in Appendix C. There was a request to remove the “journeyman” example of qualifications in section 25.6.

Section 25.7 describes machine-guarding requirements and refers to more detailed examples and a compliance checklist in Appendix B. Section 25.7.1 describes guarding requirements for lab equipment and refers to Appendix C. There were requests to clarify that the compliance checklists are optional tools, and are not required to be completed to document that each piece of equipment has been assessed. Corrective actions for equipment that needs to be fixed can be documented in the Corrective Action Tracking System (CATS).

Section 25.9 describes general safety rules for power tool use.

- Paragraph aii uses a 3/8-inch drill as an example of a power tool that presents a minimal hazard. The 3/8-inch refers to the chuck size of the drill.
- Paragraph c requires that the tool operator “secure the area. It should be clarified that securing means to ensure that people who enter the area wear appropriate PPE.
- Paragraph e requires a penetration permit for penetrations greater than 1.5 inches. Penetration permits are now required for any drilling into concrete. The 1.5 inches should be removed and a reference to the Facilities policy inserted.

Section 25.10 describes general safety rules for use and maintenance of machine tools and machine equipment.

- Paragraph d requires anchoring of “equipment designed by the manufacturer to be fixable.” It would be more consistent to describe it as stationary equipment.
- Paragraph j says to wear shirts with sleeves and paragraph n says to cuff or roll up long sleeves. This could be confusing. It was recommended that it should just say to wear appropriate clothing, and let the supervisor or shop manager set the local rules as to what clothing is appropriate to the hazards.
- Paragraph m prohibits persons under the age of 18 from operating any dangerous power tool unless the work is part of a state-approved apprenticeship program. The word “state” was removed because it was not clear what type of approval would be necessary.
- Paragraph u, authorized by line management means approved through a JHA.

Section 25.10.1 describes safety rules for operating laboratory machine equipment. Paragraph ci requires formal authorization for use of laboratory equipment that may expose personnel to injuries. A JHA is defined as a formal authorization.

Section 25.11.1 says that LBNL division directors are responsible for identifying a home division owner/responsible person for each shop. The intent was to ensure that divisions that have satellite shops retain responsibility for ensuring safety. There were questions about what aspects of shop safety the line management person would be responsible for and what responsibilities could be delegated to the shop manager. It was requested that the word “owner” be removed.

The checklists and forms in the appendices are intended as examples or suggestions. Equivalent systems may be used. It was requested that this intent be stated in the text.

EHS Division maintains copies of the current ANSI machine guarding standards. Anyone who wants to see the standards should contact the Subject Matter Expert.

Richard Kadel complimented Mike Wisherop on the wonderful job he did in developing Chapter 25. The Chapter, with the changes discussed, was approved by a vote of all SRC members present, with no objectors.

General Discussion

Oscar Dubon had a concern that the group JHA seems to require fire extinguisher training for any use of flammable chemicals, no matter how small. Other members commented that the requirement may be waived where appropriate.

Jerry Ohearn was introduced as the new SRC representative for Facilities Division.

The meeting was adjourned at 11:30 AM

Respectfully submitted, Patricia M. Thomas, SRC Secretary