

**Safety Review Committee  
December 15, 2006  
10:00 AM – 12:00 PM**

**Minutes**

<b>Committee Member</b>	<b>Representing</b>	<b>Present</b>
Ager, Joel W.	Materials Sciences Division	<b>X</b>
Banda, Michael J.	Computing Sciences Directorate	<b>X</b>
Blodgett, Paul M.	Environment, Health and Safety Division	<b>X</b>
Cork, Carl	Physical Biosciences Division	<b>X</b>
Fletcher, Kenneth A.	Facilities Department	
Franaszek, Stephen	Genomics Division	
Garbis, Carla	Directorate/OCFO/Human Resources	
Kadel, Richard W.	Physics Division	<b>X</b>
Leitner, Daniela	Nuclear Science Division	<b>X</b>
Lucas, Donald	Environmental Energy Technologies Division	<b>X</b>
Lukens Jr., Wayne W.	Chemical Sciences Division	<b>X</b>
Martin, Michael C.	Advanced Light Source Division	<b>X</b>
Nakamura, Seiji	Earth Sciences Division	<b>X</b>
Seidl, Peter A.	Accelerator & Fusion Research Division	<b>X</b>
Smith, Linda K.	Information Technology Division	<b>X</b>
Taylor, Scott E.	Life Sciences Division	<b>X</b>
Thomas, Patricia M.	Safety Review Committee Secretary	<b>X</b>
Wong, Weyland	Engineering Division	<b>X</b>

**Others Present:** Paul Alivisatos, Steve Black, Richard DeBusk, Rick Kelly, Eugene Lau, Georgeanna Perdue, Janice Sexson

**Minutes of November Meeting** – No comments have been received.

**Materials Sciences Division MESH Response – Paul Alivisatos**

Materials Sciences Division (MSD) has about 550 staff members and 413 temporary people. About 40 of the 74 Principal Investigators are faculty members. MSD personnel are located in 16 buildings. Rick Kelly is the Division Safety Coordinator, and Paul Johnson is his assistant. Safety is a significant budget commitment, approximately 15% of the organizational burden. Because MSD hosts many students and guests, they view safety as an opportunity to teach safe work practices that visitors will take with them to other institutions. The division does many different kinds of research, and different rules apply on campus than at LBNL. Another challenge has been responding to many inspections. Rick Kelly has been spending about 1/3 of his time responding to audits.

All MSD groups have been asked to discuss safety at their group meetings. There is a Safety Calendar in table format to remind people of important dates for safety activities.

Monthly newsletters are e-mailed to MSD people. MSD has been using peer-to-peer training for some safety classes. Selected PIs are trained as course instructors and present the classes to their peers. This allows them to share real-world experiences and examples.

Line Management Authorizations are being reviewed. MSD is developing a project hazard guide checklist and there will be training.

Problems with Satellite Accumulation Areas decreased when fines were imposed, and started going up again when fines were discontinued, so the fines have been reinstated. New investigators are being trained. There was a suggestion to use the EH&S Waste Management inspection checklist.

The ISM Plan is being updated. It is expected to be completed in February 2007.

30/40 items found in the recent DOE Industrial Hygiene audit have been closed. The LBNL policy on labeling secondary chemical containers with the hazards as well as the chemical name goes beyond the regulatory standards. It was suggested that the LBNL standards be adjusted to match the regulations.

MSD safety initiatives include expanded peer-to-peer training, monthly lab inspections and a safety booklet for PIs.

Trying to communicate with and motivate students and post-docs is a challenge. One way to do this is to tie safety as a social value to the students' idealism. Another challenge is having 5 different agencies doing quarterly inspections.

The MESH team was concerned about violations found in the new Molecular Foundry labs, for example, some people were not wearing safety glasses. MSD has adopted a new, clearer policy that eye protection is required except in designated areas. The current LBNL policy may not be clear. The MESH team also found that required hazard signs on doors were not in place. This was because MSD was not satisfied with the standard signs, so they are creating new signs that will be posted soon. People ignoring safety signs is a performance issue. The LBNL training may not be effective and/or new Foundry people may not completed training. There was a comment that we need to ensure that training is focused on teaching people to work safely, not just complying with training requirements.

Paul Blodgett, MESH review team leader, thanked MSD for responding to the new Berkeley initiative on nanomaterials. LBNL will need to develop a policy for all divisions that have nanomaterials. Paul also commented that MSD needs to ensure that safety responsibilities are effectively delegated from PIs to Work Leads, and that Work Leads as well as PIs are trained to meet their responsibilities.

### **Chairman's Comments – Don Lucas**

Berkeley Site Office representatives have been directed to spend 30% of their time on fieldwork and have started asking Safety Coordinators to do walkthroughs with them. There is a concern that requests for division resources should go through the division management. General requests for resources should go through EH&S or LBNL senior management. Suggestions for improvement noted by BSO during walkthroughs needs to be communicated to division Safety Coordinators and discussed with them.

There will be two SRC meetings in January. The first meeting on January 19 will be the meeting with Dr. Chu and include MESH responses. The second meeting on January 26 will focus on PUB-3000 revisions needed for 10 CFR 851 compliance.

There is a concern from researchers that the Biosafety Committee requirements may be exceeding the Committee's mandate and go beyond regulatory requirements. The affected divisions want to be able to comment on proposed changes to the biosafety chapter of PUB-3000. There may be other ways to ensure safety that are less burdensome to the researchers.

After the 10 CFR 851 safety plan is approved by DOE, significant (major) changes will require DOE approval. We may find that some things in the safety plan don't work well and need to be changed. We need to clearly separate recommended best management practices from mandated requirements.

### **Traffic and Pedestrian Safety Subcommittee Report — Janice Sexson**

The Traffic and Pedestrian Safety Subcommittee was established in 2005. All their meetings are open to interested people. They will publicize at least 2 meetings a year to encourage participation. The most frequent complaints they receive are parking problems, speeding, and failure to stop at stop signs. Janice described some of the issues the committee has been addressing:

- Stack parking at Bldg. 75 has been a problem because the spots have been made smaller and vehicles are larger. Shift workers have difficulty getting out because people who work later hours park behind them and aren't always available to move their vehicles. There is a need to designate some spots for shift workers.
- Crosswalk visibility on the hill near Bldg. 65 has been improved with flashing signs. Pedestrians need to push a button to activate the lights. Janice did observations of people running down the steps and across the road. It is hard for trucks to stop on the hill. A 15-mile per hour speed limit is being considered, but it is difficult to drive that slowly on the steep hill.
- There is a problem with people running the stop light behind Bldg. 71, near the trailers. People in the area took videos of vehicles failing to stop. This is just one example of this problem. More enforcement is needed for moving violations. About 10 people have lost parking privileges in the last two years.
- An SRC member described a near miss involving a person slipping and almost falling on crosswalk paint. Facilities is trying a new paint application, but it is still somewhat slippery. They are using a California-approved paint.

- People exiting the Grizzly Gate have had near misses with skateboards and bicycles coming down the hill. There was one accident involving a bicycle running into a vehicle. UC owns the property outside the gate.
- A bus stop is being added at the Molecular Foundry. There is a long straight stretch nearby and people are driving too fast. A stop sign has been proposed.

People who would like to discuss these or other traffic and pedestrian safety issues further are urged to attend a Subcommittee meeting.

### **Proposed Changes to PUB-3000**

Richard DeBusk summarized the progress made and actions needed to comply with 10 CFR 851. The safety plan must be ready for signature on February 26. The plan will be discussed at the February SRC meeting. All the required PUB-3000 changes must be completed before the safety plan is signed. There will be 4 drafts before the plan is ready. Berkeley Site Office is reviewing the third draft. There is a subcommittee working on hazard analysis. There are weekly meetings with Berkeley Site Office to review new corrective actions entered in the CATS database. Bill Wells has been hired to be the 851 program manager. He has been performing the same function at Livermore. Bill Wells will start in January. Full compliance with 10 CFR 851 is required by May 25, 2007. Enforcement actions are most likely to take place as a result of an accident investigation.

### **Chapter 1 ES&H Policy, Management, and ISM Integration – Richard DeBusk**

Most of the changes are current practices that need to be documented in PUB-3000. For example, safety committee meetings must be held on the employer's time. The use of terms has been updated.

The most significant change is the proposed section 1.4.5.2 Safety Walkaround Program, to document the requirements initiated by Stephen Chu's letter and Today at Berkeley Lab article. The proposed language included the statement "The Division walkaround program will, at a minimum, delineate who is required to perform walkarounds, the frequency (a minimum frequency of quarterly for all work activities and workplaces is recommended), and the required reporting mechanism." SRC members asked that this statement be changed to: "The Division walkaround program will, at a minimum, delineate who is required to perform walkarounds, the frequency (a frequency of quarterly for all work activities and workplaces is suggested), and the required reporting mechanism." Division ISM plans will need to be updated to implement the program.

There were some comments on other sections:

- Under Section 1.3.5, managers and/or supervisors should review Job Hazard Questionnaires, not Work Leads.
- In Sections 1.3.2.3, 1.3.11.2, and 1.3.2.11.4, please clarify who is the Authority Having Jurisdiction for different types of electrical work.
- Please clarify and update the designations for OCA, OIA, and OAA.

- Section 1.3.3 states that workers have the right to be notified when monitoring results indicate they have been overexposed to hazardous materials. It was suggested that this be strengthened to state that workers shall be notified.
- It was suggested that Section 1.5 be expanded to tell people what to do when they receive a request to stop work (that is, to stop work until the safety issue is resolved).

There was a discussion regarding whether EHS027 walkthrough training should be required or recommended. There was a suggestion that all required safety training for supervisors be included in one class. Supervisor training is needed because while some supervisors are already doing effective walkthroughs, the level of commitment is variable. Walkthrough training is not required by regulation. The Advanced Light Source has been providing a similar walkthrough class. They can apply for an equivalency determination. Some divisions are tracking completion of the walkthroughs as quarterly CATS items assigned to the supervisors. The walkthrough requirement is in response to review findings and Dr. Chu's request. Divisions are to identify through their ISM Plans who must perform walkthroughs. It may not be possible to identify the right people through a Job Hazards Questionnaire question. Division directors requested flexibility in determining who should do walkthroughs. There are concerns about the impact of required training time on researcher productivity, as the competition for grant funding is very difficult now. Some divisions have very flat organizations with just Principal Investigators and their researchers, and the PIs are in the labs most of the time. Walkthrough checklists are not required. The training class content, checklists, and tracking methods can be tailored to meet the needs of each division.

The proposed changes to Chapter 1 were approved by a vote of all SRC members present with no objectors.

### **Chapter 10 Construction – Richard DeBusk**

The Chapter Author is Jean Myers. This chapter collects the requirements for construction safety in one place from various Facilities documents to provide greater clarity.

Comments included:

- Section 10.9.1 Site Orientation and Pre-job Training, does not require General Employee Radiation Training. This was discussed with Radiation Safety and they did not think it was necessary.
- Sections 8.3.2 and 8.3.5 require Ground Fault Surface Interrupter (GFCI) use. Please specify that the contractor provides the GFCIs.
- In A.24.2, there is inconsistency in the name of the permit required for work requiring use of open flames, heat-producing, or sparking equipment (fire permit, hot work permit, burn permit). This should be standardized. The Fire Marshall recommends calling it a "Fire Safety Permit". This will avoid confusion with the permit for energized electrical work, which is also sometimes called "hot work".

- Section 10.1 says that where conflict between cited standards or safe practices occur, the more stringent standard shall apply. The Work Smart Standards include the most appropriate standards for LBNL, which are not always the most stringent. This section should say that where a conflict occurs, EH&S will determine which standard applies.
- Section 10.1.1 says LBNL is committed to providing and maintaining the safest possible work conditions. This is a general goal, not an enforceable requirement under 10 CFR 851, so it should be removed from PUB-3000.
- Please clean up the language describing requirements for extension cords.
- In appendix A, please use the same language describing requirements for surface penetrations as in the “dig permit”.
- Check and clarify the requirement to have 2 people who know first aid present.
- Testing for carbon monoxide levels each shift is not a code requirement. Please use the code requirement.
- Remove the statement about maintaining an “illness-free workplace”. Many people with medical conditions work here.
- Please clarify that the contractor is required to clean up blood under their bloodborne pathogens control plan.

The proposed changes to Chapter 10 were approved by a vote of all SRC members present with no objectors.

### **Chapter 12 –Fire Safety -- Gary Piermattei**

Chapter 12 is being revised to make the document more directed toward worker safety. There are changes to reflect the use of Alameda County Fire Department services. The Fire Protection Program in the Appendix is not enforceable under 10 CFR 851. All “beyond compliance” best practices should be moved to appendices. Gary Piermattei will respond to comments submitted before the meeting through the e-room. Other comments included:

- Section 12.1 should be clarified to specify that it applies to unintentional fires. Some research requires intentional combustion of materials.
- Section 12.7.1 contains a list of good practices for handling combustibles safely, such as storage of paper stock in metal cabinets. Please move good practices that are not regulatory requirements to an appendix.
- Table 2, please define “flammable liquids” or provide a link to a list.
- Section 12.7.2 says “do not use a flammable liquid as a cleaning agent inside a building.” Many research projects require wipe cleaning with small amounts of solvent. Please clarify.
- 12.8.2 use of timer with hot plates and coffee pots is a best practice, not a regulatory requirement.
- Don’t repeat the smoking rules in Chapter 12. Provide a link to the smoking policy.
- Appendix A, section 1.2. Does the ALS have a redundant fire suppression system, or is there an exemption?

- Appendix A, section 4.3, LBNL is not a nuclear facility.

The proposed changes to Chapter 12 were approved by a vote of all SRC members present with no objectors.

The meeting was adjourned at 12:15 PM

Respectfully submitted,

Patricia M. Thomas, SRC Secretary