Safety Review Committee
February 16, 2007
10:00 AM – 12:00 PM

Minutes

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

Others Present: Hattie Carwell, Richard DeBusk, Melanie Gravois, Mary Gross, *Rick Kelly (for Joel Ager), Eugene Lau, Georgeanna Perdue, John Speros, *Ann Tomaselli (for Linda Smith), Bill Wells

MESH Response—Chemical Sciences Division—Daniel Neumark

Chemical Sciences Division (CSD) has some unique challenges because most people (60%) work on campus and the majority of scientific staff (26) are UC faculty. The remainder is mostly postdocs and students. The division has a flat organization structure, consisting primarily of PIs supervising several postdocs and students in different labs. CSD has been working closely with campus to create equivalency in safety controls and training. Key division members serve on campus/LBNL committees. Daniel Neumark expects PIs and supervisors to be fully engaged in promoting a safety culture in their labs and offices, and to perform regular walkarounds of their workspaces. They are working on formalizing and documenting processes that are already taking place informally. CSD conducted a survey of campus PIs and interviewed hill PIs to determine what types of safety activities they do.

The CSD safety organization includes Division Director Daniel Neumark, Deputy Director Ali Belkacem, Safety Coordinator Jerry Bucher, a Division safety Management

Committee that meets monthly, and a Division Safety Committee that meets every 6 months.

The division's work presents some significant hazards: radiological work, lasers, ergonomics (workstation and manual activities), and hazardous/radioactive waste management.

The MESH Review identified 8 noteworthy practices:

- E-mail list is maintained for all staff;
- CSD and ALS work well together;
- CSD worked with campus safety staff to inspect labs on campus;
- Ergo evaluations are provided for all admin staff at least every 2 years;
- Supplemental laser safety training is provided on campus;
- Senior division personnel seem to embrace safety;
- Substantial progress has been made in clearing legacy waste; and
- PIs completed a detailed questionnaire during self-assessment.

In the area of Work Planning, there was a concern that the division ISM plan needs to be updated. The plan is in the process of being revised. The LBNL ISM Plan is also being updated, and CSD is waiting for input from the new LBNL plan before completing the CSD plan.

In the area of Hazard Identification and Risk analysis, there was an institutional concern that campus work did not appear to have the same oversight as work on the hill. There was also an observation that there was some confusion about when a work authorization takes effect. In response, CSD has expanded the Division Safety Committee to include faculty and students from campus, held a division –wide safety meeting to discuss Integrated Safety Management, surveyed campus PIs on their safety culture and practices, and implemented supplemental laser safety training on campus. Another meeting was held with students and post-docs, which resulted in identification of a problem with inaudible alarms in Bldg. 2.

In the area of Establishment of Controls, there was an institutional concern that there is no systematic assurance that low-hazard activities are reviewed and appropriately addressed. In response, CSD holds PIs responsible for hazard identification and risk analysis. PIs address hazard identification and risk analysis in work plans and formal authorization preparations and by completing a hazard assessment sheet or checklist for workspaces. A CSD scientific group has volunteered to be part of the new Job Hazard Analysis program.

In the area of Work Performance, there was a concern that there appears to be some lack of adherence to requirements identified in authorization documents, as evidenced by (1) a laser being installed and commissioned without a fully executed AHD and (2) a researcher attempting to order a larger quantity of hazardous gas than an AHD allowed. In response, a new laser system was installed and commissioned with proper authorizations. The attempt to order excessive gas was caught by existing EH&S

procurement review. In addition, in response to an accident that involved superglue getting into a person's eye, the policy regarding use of safety glasses was clarified.

In the area of Feedback and Improvement, there was an observation that the findings regarding training deficiencies and low-level hazard review from the last MESH review have not been systematically addressed. The MESH review noted that the division has done a very good job with JHQs and training for LBNL staff. MESH team members have remaining questions about how training is tracked for people who work on campus. While the campus has intense "on-the-job" training, they do not have formal classes that can be easily tracked. Campus work is governed by the campus Injury and Illness Prevention Plan under Cal-OSHA requirements. CSD is attempting to document the informal training that takes place on campus by doing detailed surveys. Students funded by DOE may take the Job Hazards Questionnaire and LBNL courses, but the course content is not always appropriate to work on campus. People who work on the hill are required to take the JHQ and LBNL training.

DOE will be looking for documentation of on-going inspections on campus. CSD is aware that frequent walkthroughs are being done and they are working on documenting the walkthroughs. The campus PIs have walkthrough forms. Safety is being discussed at group meetings, but it hasn't always been documented. EHSD is working on a database that can be used to document walkthroughs. Ali Belkacem asked that divisions be allowed to decide how to document walkthroughs because the divisions are all different. Each division should have a method to document walkthroughs and safety communications, but LBNL needs to ensure that division and UC methods meet DOE requirements.

Daniel Neumark asked John Chernowski to check whether a finding in the annual Self-Assessment Report regarding non-compliances in laser labs was meant to apply to CSD.

Chairman's Comments – Don Lucas

The Physics MESH report is nearing completion. The Physics Division MESH response is scheduled for the March SRC meeting.

A draft MESH plan for 2007 was distributed.

The Job Hazard Analysis and the Crane and Hoist Safety chapters of PUB-3000 have been referred to David McGraw for review.

John Chernowski introduced new Office of Contract Assurance member Melanie Gravois. She will be working on corrective action management, lessons learned, MESH facilitation, and other projects.

Proposed Changes to PUB-3000

Chapter 31 Subcontractor Safety Program– Eugene Lau

Eugene Lau described proposed changes to the draft chapter in response to comments previously submitted, and committee members contributed additional comments and discussion as follows:

Section 31.1 Introduction –

"Subcontractors" are defined as vendors who provide services on site, including vendors who install or maintain scientific equipment. This change addresses a comment from Joel Ager.

The scope of the chapter may be too broad, as there are several types of contractors (construction, maintenance, R&D, etc.). This chapter does not cover construction contractors or off-site work. The distinction between construction work and installation of research equipment that requires attaching equipment to facility structures is not clear.

Section 31.2 Policy–

"Requester" was defined as the individual in the division requesting the on site service or work. It was clarified that the requester is the person who asked for a service, not the person who just enters the information into the procurement request system (e-Pro). There are separate data field in e-Pro for the requisition preparer and the requester.

"In the division" should be deleted because the requester can be a matrixed person, and not all employees are in a "division".

Section 31.5 Worker Safety and Health Plan Exclusions and Exceptions –

Committee members asked for additional examples and clarification of above and below negligible risk activities.

Some examples are ambiguous: "Copy Machine repair and maintenance" may be above negligible risk when it includes "repairs that require electrical work" and "Desktop computer consultation services" is not negligible risk when it includes "computer work more than four hours".

Examples of "above negligible risk activities" were added.

"Repairs that require electrical work" needs to be defined. This was intended to mean work on energized electrical systems >50 volts. The hazard category description in

Chapter 8 should be referenced. It was suggested that Procurement should ensure that work >50 volts is evaluated.

"Maintenance and repairs that require power tools" was not intended to include equipment repairs using small electric screwdrivers. This needs to be better defined.

Subsurface surveys by the "Hummer crew" prior to penetration permits are probably negligible risk work.

It was asked what a requester should do if the scope of the work changes. The requester would need to contact EHSD and do a change order. This would create difficult situations if a repair person is scheduled to be at LBNL for a short time and EHSD is not able to respond immediately. The requester should try to define the scope of work broadly in the initial submittal to avoid change orders.

Worker Safety and Health Plans are not required to be submitted to LBNL for service contracts if the service agreement is part of an original purchase order for supplies and equipment. DOE allows this exception because vendors generally have procedures in place for working on their own equipment. There was a question about how PIs/requesters could be expected to enforce the subcontractors' safety plans if LBNL does not have copies of them.

Requesters are not always qualified to evaluate the hazards of the work they request. Subcontractors are often hired because the requester does not have the expertise to do the work. The PI should identify the potential risk. It is the subcontractors' job to tell us how they are going to do the work safely. Procurement should be the gatekeeper to ensure a safety plan is prepared. Requesters should ask for assistance from EHSD (Eugene Lau) or qualified people from other divisions to evaluate subcontractor safety plans. There is a concern that there may not be sufficient safety professionals available to evaluate the safety plans or oversee the work.

Section 31.6 Subcontractor Worker Safety and Health Program --

A contact phone number and e-mail address for EHSD assistance was added.

The draft says that EH&S has three days to comment and concur with the plan after receipt. The commitment to review safety plans in three days should be removed. It may not always be possible to complete the review in three days. The PI/requester needs to wait for the EHSD response.

The usual procurement process includes awarding the contract, then further negotiating conditions and approving the safety plan before issuing the notice to proceed. For some service contracts, the requester is required to start paying as soon as the contract is awarded. This can be a problem if the notice to proceed is delayed.

Subcontractors can submit a baseline safety plan that describes their overall safety program and a supplemental plan that addresses specific tasks at LBNL. If PIs/requesters are going to be held responsible for enforcing the plans, they need to have access to the plans. An on-line system could be set up like the Engineering document control center. Some plans are not provided electronically and would have to be scanned.

Section 31.7 Basic Subcontractor Health and Safety Plan Elements--

The required occupational medical services program should be described as "appropriate" rather than "comprehensive".

Section 31.8.1 The Division Director --

This section on Division Director responsibilities should be removed. It is already covered under their general Line Management Responsibility for safety.

Section 31.8.2 The Division Procurement Requester--

Change title to "The Requester". This section needs to be reworked to better define what is expected from requesters, procurement, and EHSD. The PI/requester evaluates the potential risk (using EHSD and other technical resources) and submits Appendix A, Procurement requests the subcontractor Worker Safety and Health Plan (WHSP), and EHSD reviews the safety plan. The plan should be equivalent to a California Illness and Injury Prevention Plan (IIPP). The Subcontractor is legally bound to comply with their signed safety plan.

There were questions about whether Principle Investigators (PIs) or other requesters are expected to oversee subcontractor work. Continual direct observation of subcontractor work is not required except in certain circumstances specified in other chapters of PUB-3000 (e.g. safety watch for energized electrical work in Chapter 8, confined space entry, etc.). The PI/requester has responsibility for safety but "ensure" is the wrong word. The PI/requester is expected to exercise stop work authority when obvious unsafe practices are observed. There was an example given of two supervisors being fired after a subcontractor accident. There was a concern that PIs/requesters are being put at risk by being asked to ensure control of hazards they may not understand.

Section 31.9 Issue Resolution—

Move the words "The requesters division will be responsible for overseeing the subcontractor's safety performance" to the beginning of Section 8, in bold font. Delete " including the completeness of the WSHP."

Section 31.12 Incident Reporting and Stop Work Procedure --

Communication of the stop work policy is included in contract terms and conditions.

Section 31.13 Subcontractor Feedback and Improvement –

Eugene Lau is acting as the Subcontract Safety Lead

Section 31.14 Record Retention –

See 31.6 comments regarding document availability.

Appendix A—

The hazard evaluation form will be difficult for PIs to complete. LBNL should look at how other DOE Labs address subcontractor safety. At LLNL, procurement, EH&S and the PI review safety plans for service contractors ahead of time. The PI is responsible for safety, but not required to oversee all work. The language is loose. LLNL provides a list of examples of above/below negligible risk. Their hazard evaluation form is seven pages long, but the extra length includes explanations of the questions. This information is useful to the PIs/requesters.

General Comments—

10 CFR 851 requires LBNL to have a subcontractor safety plan, but it doesn't specify the details. This chapter would apply to on-site work only. The PIs' responsibility comes from Integrated Safety Management principles. Some companies/labs enforce subcontractor safety through an oversight office, but that approach would give less control to the divisions. An approved subcontractor WHSP and stop work authority may not be sufficient. LLNL has more detailed requirements, but they also have a higher overhead rate that results in work coming to LBNL. We are trying to define an acceptable level of control. Subcontractors will be treated like employees of the requester for ISM purposes.

Policy Decision--

This chapter needs to be referred to LBNL senior management (David McGraw) for evaluation and approval. It needs to go to Dr. Chu by February 26. The committee is not ready to vote on the draft submitted today. There are too many unresolved comments remaining. Don Lucas requested that Eugene Lau respond to the comments and post a revised draft on the PUB-3000 e-room by late Tuesday, February 20. SRC member may submit additional comments on Wednesday, February 21. An electronic vote will be taken via the e-room by the morning of February 23.

The meeting was adjourned at 12:00 PM
Respectfully submitted, Patricia M. Thomas, SRC Secretary