Safety Review Committee
November 16, 1007
10:00 AM – 12:00 PM

Minutes

Committee Member	Representing	Present
Banda, Michael J.	Computing Sciences Directorate	X
Bello, Madelyn	Human Resources Advisor	X
Blair, Steven A.	Facilities Division	X
Blodgett, Paul M.	Environment, Health and Safety Division	X
Cork, Carl	Physical Biosciences 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	X
Lukens Jr., Wayne W.	Chemical Sciences Division	X
Martin, Michael C.	Advanced Light Source Division	X
Nakagawa, Seiji	Earth Sciences 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	X
Wong, Weyland	Engineering Division	X

Others Present: Kim Abbott**,** Ken Barat, Hattie Carwell, Richard DeBusk, Paul Fallon, Michelle Flynn, Keith Gershon, Melanie Gravois, Mary Gross, Howard Hatayama, Julie Henderson, Carol Ingram, Neil Landau, Tony Linard, Mike Ruggieri, John Seabury, Janice Sexson, James Symons, Bill Wells, Linnea Wahl, Marty White

Chairman's Comments—Don Lucas

Minutes of October meeting were reviewed and 3 minor corrections were provided to the draft minutes.

The Committee welcomed the new Directorate/Operations representative, Dan Twohey.

2007 MESH status:

- Nuclear Science Division will give their presentation today.
- Engineering Division will be ready to give their presentation in December, but there may be a scheduling problem.
- Life Sciences Division report has been drafted.

- Environment, Health and Safety Division final report has been signed. They will be ready to give their presentation in December, pending confirmation of Howard Hatayama's schedule.
- Directorate/Operations report has not been completed. They will not be ready to give their presentation until January.

DOE Order 142.3, foreign visitors, requires people inviting visitors to LBNL to provide 30 days notice. This requirement needs clarification. We also need clarification of the requirement for completing a JHQ for guests who will be working at LBNL for more than 30 days. Does this mean 30 consecutive days, 30 days/year, or 30 days total? Human Resources requires similar documentation for employees and guests. Guest JHQ completion has been an issue in the MESH reviews this year. This is especially a problem for User Facilities. We may need different terms to distinguish different guest roles, or a separate website with guest safety requirements.

Job Hazards Analysis Update – John Seabury

Proposed revisions to PUB-3000, Chapter 32 were posted on the PUB-3000 e-room. Several SRC members submitted comments, and John Seabury will be responding to the comments.

A brief history of the Job Hazards Analysis (JHA) effort is as follows:
- In late 2006, a focus group was formed;
- In March 2007, PUB-3000, Chapter 32 was posted on the EH&S website;
- From March – October 2007, a pilot program was conducted;
- Now, in November 2007, Chapter 32 is being updated to incorporate lessons learned from the pilot program.

There are no major changes in policy. Chapter 32 has been clarified to indicate that construction JHAs are covered in Chapter 10. Examples of tasks, hazards, and controls have been refined.

On the advice of Human Resources, the signature blocks were clarified to indicate that the worker signature is not required. LBNL management has the authority and obligation to prescribe job safety requirements. The employee's signature is desirable, but work will still go forward under the requirements if an employee declines to sign.

The individual baseline JHA is an electronic process. The inclusion of a form created confusion. A prototype example (maybe Dr. Lawrence) should be provided instead of the blank form.

Committee members were concerned that not requiring the worker's signature would set a precedent for not requiring signatures on other formal work authorizations, such as AHDs. Human Resources advised that it is a condition of work to follow the work rules, but not to sign them. Committee members were concerned that without a signature, there is no way to verify that the employee has read and understood the requirements. The

SRC would at least like a signature indicating that the worker has read the JHA. There are some institutional requirements that workers don't sign (property, diversity, etc.); however, there is a trend to start requiring signatures for more of these in the future. The JHA is a work authorization, and most other formal work authorizations require the workers to sign. There was a concern that Principal Investigators/Work Leads would not be comfortable with authorizing a person to work on their project if the person's refusal to sign the JHA indicates that they do not agree with or intend to follow the safe work rules. The Safety Review Committee recommends that a worker signature be required on the JHA.

John Seabury will add a brief explanation of the purpose and benefits of the JHA process in the introduction to Chapter 32. There will also be an explanation that the JHA is part of the Job Hazards Questionnaire (JHQ) process.

The JHA for a person will reference any other formal work authorizations that include that person.

Where do we go from here?

- Next month, Chapter 6 will be revised with the JHA incorporated.
- November – December 2007, the software will be implemented.
- December 2007 – January 2008, divisions will decide which work groups need group JHAs.
- January – May 2008, group JHAs will be developed.
- June – September 2008, people will retake the new JHQ and complete individual JHAs. There is a contract performance goal to complete 75% of JHAs by the end of September 2008.

There was a question about the number of facilitators needed by Divisions to complete the JHAs on schedule. John Seabury and Richard DeBusk will facilitate the first JHAs, while training the Division Safety Coordinators and EH&S Liaisons how to facilitate the remainder. The anticipated level of effort is about 20-30 hours per division over 5 months, assuming 200-300 groups, requiring 1 – 1.5 hours each, spread over 15 divisions.

The Safety Review Committee requested that the issue of worker signatures be discussed with Human Resources and clarified before taking a vote to approve/disapprove the proposed changes to Chapter 32. The SRC wants to find a way to require the worker signature. The vote can be taken at the December meeting. John Seabury will proceed with the Chapter 6 changes.

MESH Presentation: Nuclear Science Division – James Symons

Nuclear Science Division (NSD) Director James Symons thanked the MESH committee for their work. He introduced the safety staff, EH&S Coordinator and safety committee chair Marty White, EH&S Liaison Linnea Wahl, and Division Deputy Paul Fallon. He described the Division's 8 major programs and projects. They are doing more project work and less accelerator work than in the past.

The elements of the safety program include the updated Integrated Safety Management Plan, Safety Line Management including group leader and program head involvement, two safety committees (division and 88" cyclotron), a mandatory annual meeting, bimonthly division meetings at which ES&H is discussed, an ergonomics plan, and an improved website.

Noteworthy practices included:

- Posting signed and dated instruction sheets in the 88" cyclotron control room;
- Project/Facility Safety Review Questionnaires reviewed annually
- Biweekly meetings;
- Senior management involvement.

Concerns from the 2004 MESH review included:

- Ergonomics evaluations progressing slowly – There are now 3 trained evaluators and requested evaluations are happening quickly.
- Some equipment not seismically braced – Equipment bracing is being checked during walkthroughs.
- RWA violations due to surveys not being completed on schedule – Different people who are at LBNL more frequently have been assigned this task.
- AHDs not reviewed on schedule – All AHDs are now being reviewed and are on the new database.
- Action item completion rate – 100% of CATS items were completed in FY07.

MESH findings from 2007 included:

- Housekeeping in the 88" cyclotron mezzanine – This area has been cleaned up and cabinets have been braced.
- Project Safety Questionnaires not completely filled out – The safety committee is evaluating whether these questionnaires will still be needed once Job Hazard Analyses are implemented.
- The charge of the safety committee was unclear – This is now described in the ISM Plan.
- Safety at the 88' is management separately—The division reviewed the issue and found that some separate management is appropriate due to the nature of the hazards. They are ensuring integration and communication between the 88' and division safety committees.
- Resolution of walkthrough findings was not always being tracked – The walkthrough checklist is being revised to indicate resolution of findings.
- Control room ergonomics need improvement – This will be reviewed.
- The keys used in the system to indicate when prompt radiation fields are present were not well controlled – The system was reviewed and found to be adequate. The area around the accelerator can be entered for essential work. The purpose of the system is to communicate that radiation levels may be greater than ambient when the cyclotron is running light beams. Training is required to access controlled areas.

- Quarterly surveys being performed late – The RWA surveys are being done, but the timing has sometimes been a few days off.

In general, the MESH review committee found that Nuclear Science Division has a sound and effective safety program.

Subcontractor Safety – Richard DeBusk

Richard DeBusk briefed the Division Directors on the status of subcontractor safety yesterday.

LBNL has had 6 reportable Occurrences involving subcontractors in the last 8 months, resulting in a recurring ORPS. A project team was formed and began working October 23, 2007. The team includes research division representatives and Facilities Division representatives. The project team has formed two groups, one to work on construction subcontractor issues and one to work on service vendor issues. Processes have been mapped. They are looking at the Materials Sciences Division subcontractor permitting process as a possible model. They are also looking at how other Office of Science labs (Stanford, Ames, Jefferson Lab) manage subcontractor safety. The Stanford Linear Accelerator (SLAC) pipe explosion was studied.

A graded approach is needed to address different types of work and levels of hazard. Procurement doesn't always have the best information about the risks involved in vendor work. Division personnel may not always understand the risks of the work they are requesting. Screening questions are needed to determine the level of risk. The overall goal is to address deficiencies without undue costs or delays. LBNL needs to work with vendors to ensure work is compliant with our standards.

There was a question about what LBNL is doing in the interim to ensure subcontractor safety while the program is being developed. Materials Sciences Division Safety Coordinator Rich Kelley is spending about 20% of his time implementing the division's vendor permitting program. Procurement is screening vendors, and EH&S Division is reviewing safety plans. Bill Wells is leading the program for EH&S. The Advanced Light Source has been writing safety plans for vendors.

We are finding that some vendors only have state safety plans, and LBNL needs federal plans. Some vendors only have 1 person qualified to do the work we need. We are finding that about 60% of vendors need help to do work safely. It requires interaction between all parties involved (EH&S, Procurement, requesting division, vendor). Someone needs to coordinate communications. Some degree of oversight may be needed.

The work needed to assist vendors is an unfunded mandate. The cost to LBNL needs to be assessed. The burden will be greater for some divisions than others. We will need a pilot program to understand the EH&S resource demands. There is a concern that EH&S subject matter experts may be overloaded and not be able to respond promptly.

Subcontractor safety permits will be similar to the task-based Job Hazard Analysis. To reduce costs, the vendor needs to be able to do some of the paperwork ahead of time and ensure they arrive with the necessary PPE. Vendor time is expensive. Warranty work was previously excluded and needs to be captured in the new program. Divisions are concerned about losing service for some equipment if the vendor is unwilling to meet our safety program requirements. This would put pressure on the researchers to try to fix the equipment, which may cause other safety problems. The information in the pre-bid package needs to be clear about what is expected from the vendor. Just requiring compliance is not enough information.

There will be status updates at the December and January SRC meetings. The subcontractor safety requirements will go into PUB-3000, Chapter 31. It may be ready for approval at the February meeting.

Electrical Equipment Inspection update – Keith Gershon

LBNL received a letter from the Berkeley Site Office (BSO) on September 11 accepting the outline for the electrical equipment inspection program. We still owe DOE more details. We are expecting another DOE audit of our electrical safety program during the week of February 4-8.

The Advanced Light Source has been doing a pilot survey of electrical equipment. They catalogued 889 items. It took 2 people100-125 hours, or about 10 minutes per item. Many of the items will not need to be inspected because they fall below the risk threshold. Some components that were catalogued individually will be inspected as part of assemblies. The catalogued items are being bar-coded. This is a different bar code than the property inventory system.

On October 3rd, Keith Gershon received test equipment for ground/bond and leakage testing. These are the only tests that will be needed for low-hazard equipment that has not been certified by a Nationally Recognized Testing Laboratory (NRTL). The quality of equipment grounds will be tested, validated, and documented. Each test requires about 2-3 minutes after set-up. Some pilot testing is being done. Engineering is setting up and refining the database.

The system may be ready for approval at the December or January SRC meeting. Training will then be rolled out for equipment surveyors. EH&S will hire an additional electrical safety person for about a year to help implement the program.

The Open Session of the meeting was adjourned at 11:30 AM
A Closed Session followed from 11:30 AM – noon to discuss SRC internal matters.

Respectfully submitted, Patricia M. Thomas, SRC Secretary