

Safety Review Committee
 October 19, 2007
 10:00 AM – 12:00 PM

Minutes

Committee Member	Representing	Present
Banda, Michael J.	Computing Sciences Directorate	
Bello, Madelyn	Human Resources Advisor	
Blair, Steven A.	Facilities Division	
Blodgett, Paul M.	Environment, Health and Safety Division	X
Cork, Carl	Physical Biosciences Division	
Dubon, Oscar	Materials Sciences Division	
Francino Puget, Maria Pilar	Genomics Division	X
Kadel, Richard W.	Physics Division	*
Leitner, Daniela	Nuclear Science Division	
Li, Derun	Accelerator & Fusion Research Division	
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
Smith, Linda K.	Information Technology Division	X
Taylor, Scott E.	Life Sciences Division	X
Thomas, Patricia M.	Safety Review Committee Secretary	X
Wong, Weyland	Engineering Division	X

Others Present: John Chernowski, Richard DeBusk, Michelle Flynn, Melanie Gravois, Carol Ingram, Michael Kritscher, Tony Linard, Florence Mou, Maria Robles, John Seabury, Bill Wells, *Marty White (for Richard Kadel)

Chairman's Comments—Wayne Lukens

MESH status:

- The Engineering Division MESH report is completed. The presentation is scheduled for December 21.
- The Nuclear Science Division MESH report is completed. The presentation is scheduled for November 16.
- The Life Sciences Division MESH report has been drafted and is in factual accuracy review. The SRC would like to have the presentation on December 21, if possible.
- The EH&S Division MESH report has been drafted and is in factual accuracy review. The SRC would like to have the presentation on December 21, if possible.
- The Directorate/Operations MESH review is scheduled for late October. The SRC would like to have the presentation on January 25, if possible.

PUB-3000 Revisions Expected in 2008 – Bill Wells

Bill Wells provided a list of projected changes to PUB-3000 for the next year:

- Chapter 4, Industrial Hygiene -- expanded non-ionizing radiation section, updates to lead program;
- Chapter 6, Safe Work Authorizations – major revision;
- Chapter 9, Emergency Management – major revisions in response to DOE Order 151.1C
- Chapter 10, Construction Safety – changes to administrative section;
- Chapter 12, Fire Prevention and Protection – clarification of “Authority Having Jurisdiction” process;
- Chapter 15 Occurrence Reporting – major revision;
- Chapter 16 Lasers – new section on alignment eyewear and clarification of “Authority Having Jurisdiction” process;
- Chapter 17 Ergonomics – major update;
- Chapter 21 Radiation Safety – accelerator safety driven changes;
- Chapter 25, Shop Safety and Power Tools – add section on welding safety, or create a new welding safety chapter;
- Chapter 31, Subcontractor Safety – new chapter;
- Chapter 32, Job Hazards Analysis – minor changes to be considered at November SRC meeting and new exposure assessment plan.

Welding Policy – Mike Kritscher

The new policy is being developed in response to a DOE alert about welding safety, followed by a finding that LBNL does not have an approved institutional welding program. The first step was to perform an inventory of welding equipment. This has been completed. Next, the Mechanical Safety Subcommittee drafted a welding policy and discussed it with LBNL management. Welding safety training is also being developed. The welding policy will be incorporated in PUB-3000, Chapter 25. The draft chapter may be ready by the November SRC meeting. Under the proposed policy, welding (other than spot welding) would be limited to “Qualified and Authorized” Engineering and Facilities Division personnel and outside contractors.

SRC members asked for clarification on how “welding” and the various types of welding are defined. Spot welding means resistance welding. Certified welding is defined by ANSI standards, and includes structural welding and welding involving pressure systems. The welding policy does not include soldering or brazing. It does include tack welding and any gas welding.

There were several questions about whether other divisions will be allowed to have people trained and certified to do certified welding. The proposed policy was intended to reflect the way most welding work is currently done, and reflects opinions of the Division Directors. Divisions would have to obtain and maintain certifications. Some Committee members would like to have this option available to divisions.

Dr. Lichty commented that welding inspectors are required to have medical examinations. This requirement should be included in PUB-3000.

Job Hazards Analysis Update – John Seabury

The target date for implementation of Job Hazards Analysis (JHA) has been changed from May to August 2008, to coordinate with the LBNL performance review cycle. The target for the pilot was to complete JHAs for 90% of the pilot group by the end of September, and 95% were completed. On October 24, the Work Leads who participated in the pilot program will meet to discuss Lessons Learned. Minor revisions of PUB-3000, Chapter 32 are being prepared for the November SRC meeting. There may also be a software demonstration. During the period of January – May 2008, group JHAs will be prepared. In June – August 2008, the target is to complete 75% of individual JHAs. SRC members commented that this might be difficult to achieve because it requires meetings between Supervisors/Work Leads and their workers, and many people are on travel during the summer months. If no Work Lead is identified for a person, the Supervisor is the default person to develop the JHA. Requirements of formal authorizations will be incorporated by reference. Some people have multiple Work Leads. Due to the tight schedule, all the divisions will be trying to do their JHAs at once. The first step will be to get the Division Safety Coordinators and EH&S Liaisons involved as soon as the software is available. John Seabury, Bill Wells, and Richard DeBusk will be available as mentors.

Subcontractor Safety – Richard DeBusk, Mike Ruggieri

LBNL has had 6 reportable Occurrences involving subcontractors in the last 7 months, including:

- Adding conduit to an energized breaker box;
- Installing an anchor without a penetration permit;
- Removing a panel while equipment was energized;
- Lead exposure due to lack of respirator fit testing and training;
- Mercury ejected under pressure, not reported or cleaned up properly, and tracked through a new building; and
- Rupturing an abandoned underground oil pipe with excavation equipment.

The problems and root causes were identified and discussed. There were 2 – 3 root causes per incident. The most common causes included: hazard checklists incomplete or missing, work started before the authorization was approved, the lack of a requirement for documentation before maintaining or installing scientific equipment, blanket contracts with safety plans not specific to the hazards of the tasks, Personal Protective Equipment (eyewear, respirators) not being used, inadequate training.

In response to the mercury spill incident, Materials Sciences Division developed and implemented a subcontractor permitting process. Mark Alper is the senior management

sponsor and leader for developing a subcontractor safety process for all of LBNL. Mike Ruggieri is the EH&S team leader for the project.

Subcontractors include vendors and people servicing equipment. Another issue being looked at is transfers of property from Universities to LBNL.

Divisions have a role in generating work requests, hosting workers, and accepting the work. When divisions have problems with subcontractors, the information is not always being communicated back to Procurement.

The project team will begin working on October 23. The team includes 3 research division representatives and 2 Facilities Division representatives. Tasks will include defining the scope of the issues, mapping processes, defining characteristics, analyzing the root causes, and identifying corrective actions. They would also like to do benchmarking. The study and recommendations are to be completed in January 2008. As the corrective actions are implemented, they will need to monitor progress.

SRC members commented that LBNL will need to provide information on LBNL expectations to equipment vendors. Some smaller vendors may decide not to do business with LBNL if it is too difficult to comply.

The Safety Coordinators Committee is having a special meeting at 1 PM to discuss subcontractor issues. Rick Kelley will be giving an in-depth presentation on the Materials Sciences Division permit program.

Mike Ruggieri will be attending a Peninsula Industry and Business Association meeting where subcontractor safety issues will be discussed from the vendor's perspective. Some subcontractors are taking the initiative on safety issues. LBNL recently received a list from a Canadian company of their expectations from LBNL before installing a large device.

The subcontractor safety requirements will go into PUB-3000, Chapter 31. There will be a status report at each SRC meeting as the requirements are being developed.

DOE Order 151.1C and the Building Manager (PUB-541) and Emergency Team (PUB-540) Policies -- Rocky Saunders

Rocky Saunders is the Emergency Services manager. He is working on plans for implementing DOE Order 151.1C, which requires a comprehensive emergency management system. The order was actually issued in November 2005. Implementation started in the defense labs, and it is now being gradually rolled out in the science labs. The requirements are truly comprehensive, and it will take time for the system to fully mature. A series of guidance documents are being issued.

One of the significant changes is a requirement that operational events be classified and DOE notified within 15 minutes of an event occurring. This will require participation by the Building Managers and they will need to be trained. This was discussed at the last quarterly Building Managers' meeting.

Another significant change is more detailed and rigorous emergency planning requirements. The first step is to conduct a robust hazard survey of the lab, using the existing databases (Chemical Management System, RADAR, HEAR, etc.). A consulting firm (Alpha Track) with experience in conducting hazard screening and analysis at other DOE labs will be coming in February to help with the initial assessment. The hazard screening process will be ongoing. The emphasis will be on hazardous materials. Some physical hazards are also included, such as ionizing and non-ionizing radiation. Areas that exceed certain hazard thresholds will require Emergency Hazard Planning Assessments, including release analysis and modeling. The assessments must be updated at least every three years. The thresholds are lower than those in the fire code.

There will be significant efforts involved in planning, training, and documentation. The cost has not been determined. This is another unfunded mandate. Lawrence Livermore is the science lab with the most experience with the system. LLNL, Sandia, SLAC, and Berkeley Lab emergency managers are meeting to discuss how to implement the order. It is possible to apply for variances and exemptions from some provisions

It is anticipated that changes to PUB-3000, Chapter 9 will be required. The LBNL Emergency Plan is being re-written. The existing plan was based on NFPA 1600 requirements. There were questions at the September SRC meeting about how the emergency planning documents (Emergency Plan, Building Manager policy, Emergency Team policy) are developed and approved, and how they fit into the hierarchy of documents and Work Smart Standard process described in the ISM Plan. The Committee asked Rocky Saunders to work with Bill Wells on these document integration issues. There will be a 2008 contract performance measure related to the implementation of the order.

The meeting was adjourned at 11:20 AM
Respectfully submitted, Patricia M. Thomas, SRC Secretary