

**Safety Advisory Committee**  
 June 18, 2010  
 10:00 AM – 12:00 PM

**Minutes**

<b>Committee Member</b>	<b>Representing</b>	<b>Present</b>
Anderson, Erik	Materials Sciences Division	<b>X</b>
Bello, Madelyn	Human Resources Advisor	<b>X</b>
Blodgett, Paul M.	Environment, Health and Safety Division	<b>X</b>
Cademartori, Helen	Information Technology Division	<b>X</b>
Christensen, John N.	Earth Sciences Division	
Earnest, Thomas N.	Physical Biosciences Division	<b>X</b>
Floyd, Jim	Safety Advisory Committee Chair	<b>X</b>
Fujikawa, Brian	Nuclear Science Division	<b>X</b>
Ji, Qing	Accelerator & Fusion Research Division	
Lukens Jr., Wayne W.	Chemical Sciences Division	
Lunden, Melissa	Environmental Energy Technologies Division	
Madaras, Ron	Physics Division	
Martin, Michael C.	Advanced Light Source Division	<b>X</b>
More, Anil V.	Office of the CFO Advisor	
Patterson, Pam	Public Affairs Advisor	
Pollard, Martin	Genomics Division	<b>X</b>
Taylor, Scott E.	Life Sciences Division	<b>X</b>
Tucker, Eugene	Facilities Division	<b>X</b>
Thomas, Patricia M.	Safety Advisory Committee Secretary	<b>X</b>
Walter, Howard	Computing Sciences Directorate	
Wong, Weyland	Engineering Division	<b>X</b>

**Others Present:** Mike Carr, Brandon DeFrancisci, Joe Dionne, Amy Ecclesine, Julie Henderson, Michael Kritscher, Peter Lichty, Don Lucas, Dennis Nielson, Scott Robinson, Mike Ruggieri, Bill Wells, Marty White, Mike Wisherop

**Chairman's Comments – Jim Floyd**

- The Committee thanks Edith Perry for preparing the May meeting minutes.
- Michael Martin will be the Safety Advisory Committee's liaison to the Institutional Biosafety Committee.
- Standing subcommittees are reminded to review and update their charters. We need to think about what to do for short-term subcommittees. Maybe there should be one charter that describes how they function.
- Scott Robinson is writing up the Peer Review report for Materials Sciences Division. There will be a presentation to the Safety Advisory Committee (SAC) soon. Scott Robinson will help expedite scheduling of interviews for the next Peer Review.

- There may be a lot of Committee Members away from the Lab for the next two months. Jim Floyd will look at whether there will be sufficient agenda items to make it worthwhile to meet each month. We will probably be discussing Work Planning and Control and the Peer Review in July.

### **Conduct of Operations – John Chernowski**

U.S. Department of Energy (DOE) has been working on a new draft Order 422.X Conduct of Operations. It includes product quality and protection of equipment as well as safety. Once the final Order is issued, the Berkeley Site Office (BSO) will give us 30 days to respond with an implementation plan, and 1 year to fully implement the requirements. The Order allows a risk-based approach. We will be asked to anticipate possible human errors and consider latent conditions. We hope to implement the Order through existing systems as much as possible. The implementation plan is in the form of a matrix, which must be approved by BSO. It will define the appropriate requirements.

The Order contains 18 requirements. Appendix A is a 63-page attachment that may be required for specific higher risk facilities. We are not sure how “facility” will be defined or what parts of LBNL will be included. In other DOE facility management Orders, a facility is generally defined as having a unitary purpose. Hazards, risks, and complexity are considered. The Conduct of Operations requirements apply to all nuclear facilities (LBNL does not have any) and to other facilities as determined by BSO. LBNL may not have the option to opt out of the Order.

There are concerns about how the Order may be applied for multi-divisional buildings with many activities. Committee members are concerned that less-hazardous operations may have to do unnecessary and unfunded documentation if they are in the same building as a more hazardous operation. An impact analysis is needed to assess the potential effects on cost and productivity. It could impact the ability of researchers to compete for non-DOE funding. LBNL management has an obligation to push back if the impacts will be unreasonable. LBNL needs to look at what other National Laboratories are doing. There are some substantial differences – we have the largest Life Sciences operations. Accepting the Order into the contract does not necessarily mean acceptance of applicability to Life Sciences. The Order originated at national security weapons manufacturing facilities.

We need to ensure that the Order is interpreted in a way that makes sense. Independent, stand-alone operations should be considered separately; for example, The Advanced Light Source (ALS) already complies with most of the proposed requirements for the accelerator, and beamline activities were separated out.

The LBNL Radiation Safety Committee has been discussing the Order and there is a Working Group that has been following the development. The draft Order was mentioned at a Division Directors’ meeting about a year ago, but it has changed since then. Committee members recommended that the Division Directors’ support be enlisted

and that Division Directors be involved with Anita Gursahani and Howard Hatayama in negotiating the applicability and implementation with DOE. It needs to be done right. The scientists are the customers. Things could move quickly once the Order is issued. The matrix and graded approach are part of the implementation. There should be no surprises to LBNL or BSO. The Radiation Safety Committee has developed a Position Paper that could be used for briefing the Division Directors. John Chernowski can circulate the Draft Order.

### **Space – Richard DeBusk and Dennis Nielsen**

Environment, Health, and Safety (EHS) Division and Facilities Division have been working on improving coordination of move planning. There is a Lab-wide Space Committee and plan. EHS is being included in Facilities project planning. The Project Teams are being staffed with appropriate EHS disciplines, including ergonomics. For example, EHS ergonomists are looking at plans to move EHS Division offices from Bldg. 90 to 75B. They conduct pre- and post- move surveys.

There was a problem with EHS not being involved soon enough in planning the Potter Street moves. This was because it was not listed as a Project. All personnel moves are now being listed as “Projects”.

Industrial Hygiene Group is concerned that changes in ventilation needs are not always being adequately considered. There are AHSRAE standards for the ventilation requirements based on the number of people in a building/room. The density of office populations is increasing. This was a big issue in Bldg. 70A. Ventilation improvements in old buildings are often difficult and expensive.

EHS and Facilities are working on a new procedure. Some Projects have a dedicated team. There will be a full-time EHS Project Manager for Old Town. EHS does not charge for participation in projects <\$5M.

There was a question about whether there are metrics to track and measure the status of the move coordination efforts. EHS looks at the number of recordable ergonomics issues and number of reported discomfort cases after moves. The Committee would like a progress report in about 6 months on how the effort is going.

There was a question about work authorizations for moves. Subcontractor Job Hazards Analyses (SJHAs) are being required for moving contractors and furniture installation, but they have not always been required for deliveries. Sometimes vendor personnel are not prepared to deliver equipment safely. There is a SJHA for compressed gas and cryogen delivery.

Jim Floyd asked Helen Cademartori to go back to the Space Committee and find out what they want from the Safety Advisory Committee.

### **Welding – Joe Dionne**

A 2004 DOE assessment of LBNL's welding safety program found opportunities for improvement. In response, LBNL developed on-line training requirements and JHA questions. . A PUB-3000 chapter is being drafted. The goal is to publish the chapter in August.

Authorization for soldering and spot welding is covered by JHA. ALS has the most people doing welding, cutting, brazing, soldering, etc. There are 5 qualified welders at Bldg. 77. Certified welds (for pressure vessels, lifting fixtures, or structural supports) are not done by LBNL staff.

Jim Floyd and Joe Dionne asked for people willing to serve on a welding safety subcommittee. Facilities, Engineering, and EHS participation was suggested. The plan is to have the draft chapter ready for discussion at the July SAC meeting.

### **EHS Program Management – Richard DeBusk**

Health, Safety and Security (HSS) audit corrective action CC1 required development of a policy and requirements management system. A pilot program is being conducted from December to July. The system is described in Chapter 1 of PUB-3000. Joint Genome Institute (JGI) helped to develop a Google Docs system for tracking status. The system is being used for PUB-3000 changes and all EHS programs. The new chapter has been approved by EHS Director Doug Fleming. There are 3 significance levels that require different levels of review/approval (Group Leader review/approval, SAC discussion and EHS Director approval, or Lab Director review/approval).

Jim Floyd suggested that SAC review the status of pending policies monthly. He would also like to have input from the Division Safety Coordinators Subcommittee as a standing agenda item.

### **Electrical Activity Hazards Documents (AHDs)—Jim Floyd**

ALS and Engineering Divisions have been meeting with Keith Gershon to work on electrical AHDs. They are using the PUB-3000, Chapter 8 table to define controls. Describing the work is the hardest part.

Engineering Division has been meeting with Keith Gershon and Daniela Leitner to define the scope of electrical work at the 88-Inch Cyclotron. They need to define the different categories of work, identify who should be authorized, and document the demonstration of skills. The verification and validation piece is not usually in AHDs. They are discussing how to include equipment-specific Lockout/Tagout (LOTO) procedures, how to integrate the electrical AHDs with the Work Planning and Control system that is being developed, and whether there are better alternatives.

Richard DeBusk commented that there have been concerns about how long it takes to get AHDs approved. They want to develop an on-the-job training documentation system, similar to the LOTO permit database. They will be ready to test the system in a couple of weeks, and hope to use it at the 88-inch in about a month. Each Division specifies who can approve the work. They now have a technician in EHS who can help the Subject Matter Expert with work observation and authorization. Mike Wisherop will be contacting people who do electrical work. We want to reduce the bureaucracy while ensuring real training needs are met. For example, Environmental Energy Technologies Division (EETD) scientists were doing domestic installations and there was a shock when they were working on a home that was mis-wired. They need to understand the hazards of domestic wiring systems.

### **Access Control – Don Lucas**

Don Lucas is leading an access control subcommittee. They may be ready to begin implementation at the ALS in early August. Scheduling of projects with Information Technology support has caused schedule delays. There will be a meeting next week to develop business rules for the system.

### **Safety Culture – Jim Floyd**

A team has been organized and is coordinating with the management Steering Committee. The consulting contract has been finalized and consultants are being interviewed. We are getting ready to do the assessments. DuPont has 24 assessment criteria, and the results are stored on a large database. They are adjusting the vocabulary of some of the criteria to fit LBNL. We want to have at least 20% response. We need to include non-employees because they are a significant part of our population. We need all Divisions to respond.

The meeting was adjourned at 11:45 AM

Respectfully submitted, Patricia M. Thomas, SAC Secretary