

Safety Review Committee
February 4, 2008
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 | |
| Francino Puget, Maria Pilar | Genomics Division | |
| Kadel, Richard W. | Physics Division | |
| 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 | |
| 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: Steven Chu, Richard DeBusk, Michelle Flynn, Melanie Gravois, Howard Hatayama, Carol Ingram, Ira Janowitz, Mike Kritscher, Neil Landau, Peter Lichty, Joanne Lorence, Florence Mou, Bill Wells

Chairman's Comments—Don Lucas

The changes to PUB-3000, Chapter 6 that were discussed at the November Safety Review Committee (SRC) meeting have been posted to PUB-3000.

PUB-3000, Chapter 17, Ergonomics – Ira Janowitz

Ira Janowitz described the changes to Chapter 17 that have been made since the previous SRC meeting discussion, including:

- Section 17.2 Scope now includes the impact statement.
- Section 17.3.1 describes how Division Directors appoint Ergo Advocates.
- Section 17.3.3 updates and clarifies the training requirement as being either self-assessment through Remedy Interactive or the EHS0060 class. Neither option covers

laboratory ergonomics. Environment, Health and Safety Division (EHS) can develop training for divisions who have non-computer ergonomics concerns.

- Section 17.3.2 states that divisions may require other training relevant to job tasks, such as pipetting.
- Section 17.3.8 describes the roles of Ergo Advocates. The Ergo Advocates act as resources to their division, help supervisors interpret evaluation recommendations, refer complex evaluations and “red” risk level evaluations to the ergonomics, and monitor the effectiveness of changes.

Remedy Interactive self-evaluation software is in final testing. First, there will be a presentation to the Division Safety Coordinators, and then it will be rolled out lab-wide on February 15. Remedy Interactive is the first step in a 3-tier evaluation process. If a person scores “yellow” or medium risk, the Ergo Advocate will perform an evaluation. If a person scores “red” or high risk, a professional ergonomist will do the follow-up evaluation. Remedy Interactive should be used annually or more often if discomfort occurs or the type of work warrants it. The frequency of self-evaluation will be decided by the divisions. A shorter refresher course version can be set up on Remedy, with links to the main version for details. Remedy Interactive isn’t intended to replace supervisor walkthroughs. The supervisor can observe work and provide information.

SRC members commented that supervisors will need to know what to do during Job Hazards Analysis (JHA) reviews. The responsibilities of supervisors need to be defined, especially for non-computer ergonomics. There should be instructions to call the ergonomists for microscopy, pipetting, and material handling issues.

- Section 17.4.2 describes the ergonomics display room. There was a suggestion that the section should clarify who is responsible for purchasing ergonomics equipment for matrixed personnel.
- Section 17.4.2 describes telecommuting agreements. The process will be for telecommuters to use Remedy Interactive, send a photo of their workstation to the EHS ergonomist, and have a follow-up discussion with the ergonomist.
- Section 17.9.2 provides additional information, including a link to the ergonomics supply catalogue.
- Section 17.9.2 contains the American Council of Government Industrial Hygienists (ACGIH) lifting guidelines, and then describes how LBNL standards differ for manual lifting over 50 lbs. SRC members asked that a similar table of LBNL lifting standards table be created to replace the ACGIH table.

It was decided to table the vote on the chapter until the February 15 meeting so that the recommended changes could be incorporated. Howard Hatayama commented that it is important to get a systematic, tiered ergonomics review process in place soon because there will be many personnel moves ahead.

Annual Meeting—Steven Chu and Don Lucas

Don Lucas asked meeting attendees to introduce themselves to Dr. Chu. The discussion of the ergonomics chapter is an example of the type of policy discussions the SRC conducts. Don Lucas thanked committee members for their work over the year, noting that there were several extra meetings to meet deadlines. The work of the SRC complements the work of other committees. EHS presents proposed policies to the Division Directors and Deputies; however, they usually don't get into detailed discussions. The Division Safety Coordinators Subcommittee also provides feedback on how policies will be implemented and helps to get the word out to the people who will be affected.

Several steps were taken this year to organize and expedite policy reviews. There is a PUB-3000 change form that summarizes requested changes. Non-substantive changes may be approved by the SRC Chair without a vote of the committee members.

There are non-members who frequently attend the SRC meetings, including the Department of Energy (DOE), Berkeley Site Office (BSO) staff. The chairs of the 6 safety subcommittees are also invited.

The SRC meets at least once a month. Last year, the committee approved changes to PUB-3000, Chapters 1, 6, 16, 17, 27, 28, and 32. There were deadlines to meet, and most of the chapters required some revisions. An important role of the SRC is to provide feedback as to how proposed policies will work within divisions.

Pilot programs may be used to develop and test implementation of new policies. For example, about 150 people were involved in the JHA pilot program. The JHA will be the work authorization document for all work above the level of hazard of work commonly performed by the general public. The JHA will answer the question, "How do you know how to do your job safely?" The process of developing the JHA involved presentations to other groups and committees in late 2006, a pilot program beginning in May 2007 and concluding with Lessons Learned in October 2006, PUB-3000 chapter revisions and approvals in November – December 2007, and the roll-out now in process.

The SRC has been working on standardizing terminology and definitions used in LBNL's safety program. We have also been working on coordination of changes in PUB-3000 with other policy documents, such as the Regulations and Procedures Manual (RPM).

Another function of the SRC is to perform Management of Environment, Safety, and Health (MESH) reviews. Four reviews were conducted in 2007. The MESH is a peer review that provides a different view of a division than the self-assessment. Each division receives a MESH review every 2-4 years. The review looks at both Noteworthy Practices and Opportunities for Improvement. After the review, the Division Director gives a presentation describing the improvements the division has made or plans to make in response to the review. In 2007, the Office of Contract Assurance (OCA) facilitated

the MESH reviews. After discussion with John Chernowski, it was decided that it is more appropriate for OCA to provide oversight to the review process. There is a need for an administrative position to support the SRC as well as the activities of the other safety committees and subcommittees.

Many changes were made to PUB-3000 in 2007 to meet deadlines. Now EHS and the SRC need to work on cleaning up the language and organization of PUB-3000 to make it more readable and to ensure consistency between the related policy documents. The significant changes, such as Job Hazards Analysis and the Ergo Advocate program, need to be communicated to the Principal Investigators (PIs).

Dr. Chu agreed that making PUB-3000 more readable is a noble goal, as well as ensuring coordination with Human Resources and the Regulations and Procedures Manual. Dr. Chu is concerned that implementation of Integrated Safety Management is uneven across LBNL depending on the PIs' level of awareness and commitment. Information is getting lost as it flows down from lab/division management to the PIs.

SRC members commented that the JHA process will require PIs to become involved in a discussion of hazards and controls with their work groups annually. During the pilot program, it was found that developing the JHA encourages people to bring safety issues to the attention of their supervisor. It will help refocus on working safely. Developing JHAs will require about 2-3 person-years of effort. We will need support from management to encourage the JHA as a positive opportunity. People tend to push against compliance with requirements that are not perceived as having a safety benefit. Division Directors should complete their JHAs first before asking their people to complete it.

SRC members are concerned about the cumulative burden of increased expectations of line management, including maintaining databases, reviewing vendors, learning new procedures and documenting compliance, acting as Ergo Advocates, attending training, completing Job Hazards Analyses, etc. We need to be aware of the cost of the policies we are adopting.

Dr. Chu responded that most PIs tend to get an administrative assistant to maintain databases. Dr. Chu has found that, as a PI, discussing safety with his work group, particularly sharing real-life stories of safety incidents and their consequences, has the greatest impact on improving safety. For example, he discussed alternatives to high magnification eyepieces for laser alignment.

The proposed subcontractor/vendor safety program will require meetings and interaction between PIs and the people they bring in to work on their equipment. A similar lab conducts about 100 vendor reviews/ week.

Another lab has 106,000 procedures and 8 people to write and maintain them. Audits can get too focused on procedures compliance. Too much bureaucracy can turn people off and reduce safety. Too much emphasis on procedures and documentation may be better for liability protection than safety. Dr. Chu urged committee members to help keep

safety personal so that people will really care about preventing injuries. The SRC role is to figure out what will work. Sometimes this requires vigorous discussions. Pilot programs can make processes more workable.

There may be too many training classes. We should focus on teaching people to think about safety and evaluate hazards and controls before acting rather than just memorizing requirements. Short, focused, on-site training is more interactive and effective. The nature of the work we do is “custom”, and the training needs to be custom also. The next step is to develop more division-specific courses.

Joanne Lorence said that DOE/BSO wants Division Directors hold their PIs accountable for implementing Integrated Safety Management. This is a challenge at LBNL because of the constant influx of new people.

Carole Ingram urged the Committee to make the requirements easy for the user to understand, and make it easy for people to do the right thing. She also said that hazard controls need to take into account the impact on neighboring activities, and that everyone working in a facility needs to be aware of the hazards around them.

Dr. Chu said that there is a tendency for new rules to be developed in response to safety incidents. Dr. Lichty gave the draft regulations for nanoparticles as an example of requirements that might be too extensive for the hazards involved. Another example from Life Sciences is requiring the same controls for iodine used as tracers in biology lab research as for iodine at nuclear power plants (where it may be an indicator of a reactor leak). Dr. Chu asked BSO to work with us in developing reasonable regulations and an effective safety program. He thanked the committee members for their efforts during the year.

The meeting was adjourned at 11:45 AM

Respectfully submitted, Patricia M. Thomas, SRC Secretary