

Safety Advisory Committee
 October 15, 2010
 10:00 AM – 12:00 PM

Minutes

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

Others Present: Lee Aleksich, Ken Barat, Michael Carr, Richard DeBusk, Brandon DeFrancisci, Joe Dionne, Stephen Franaszek, Mary Gross, Julie Henderson, Michael Kritscher, Peter Lichty, Gita Meckel, Rebecca Rishell, Scott Robinson, Nancy Rothermich, Mike Ruggieri, Bill Wells

Chairman's Comments – Jim Floyd

Vito Mangiardi was introduced as the new representative for Genomics Division. Vito is the Deputy Director. Marty Pollard is planning to retire in December.

Laser restart plan – The Laser Safety Subcommittee developed a proposed plan for how to restart laser operations after a safety shutdown. Jim Floyd asked for comments on what the SAC should recommend. LBNL needs an overall post-accident restart plan, but the laser portion is urgent. Laser Safety Officer Ken Barat commented that it is typical for DOE to stop laser operations at a site the day after a laser accident. At the National Renewable Energy Lab, a shutdown caused bitterness from researchers because there was

no plan as to what would be required before restarting. Stanford Linear Accelerator Lab had a plan in place for how to get permission to restart, and almost all the researchers understood the process and found the stand-down beneficial. The Subcommittee wants to plan the response before an incident occurs. The plan includes conducting an investigation, and determining how the root causes affect other labs at the site. University of California has a restart plan. Bill Wells commented that it makes sense to have a general restart plan. Jim Floyd responded that we have been waiting 10 months for EHS to propose a generic plan, so he would like to see something by next month. Mary Gross agreed that it is a good idea to develop restart plans.

Hazardous Materials Transportation – Last month, we talked about the recurring ORPS investigation. The question remains, what are our requirements for preparing hazardous materials for shipment off site? SAC members are concerned that we have not received feedback on our questions from last month. What are the requirements for getting materials to Bldg. 69? Where do Department of Transportation regulations take effect? Melissa Lunden commented that there are problems with different labeling requirements and confusing instructions and procedures. Jim Krupnick appointed an investigation committee, but Divisions are concerned about what they should do now. EETD is writing instructions for their own people. MSD is asking for some official clarification. There were questions about who to call for information because the official Subject Matter Expert retired. Bill Wells recommended calling Chuck Horton in the shipping department for packaging and labeling instructions. There is packaging assistance available at satellite locations. Researchers have not been told what to do. They are sometimes confused by inconsistencies in requirements for on-site and off-site shipments. There has been some misunderstanding of what is “hazardous”. The draft investigation report is scheduled to be finished October 15. Teresa Triplett is the team lead.

Tetramethylammonium Hydroxide (TMAH) – An alert message was sent to people who have the chemical in their inventory. It has been found that this chemical is more toxic than predicted. The amines increase the toxicity. The information was sent out as guidance. We need some kind of safety note system so this type of bulletin can be found later when needed. TMAH is commonly used in electronics manufacturing companies. There have been 3 fatal cases from handling this substance in Taiwan. One involved contact with a 2 ½% solution with prompt first aid.

Environment, Health and Safety Pipeline – Doug Fleming provided some information last month about programs and policies EHS is developing. Jim Floyd would like to get more details for next month. He has questions about whether the process matches the CC1 corrective action.

Injury and Illness Prevention – Ross Fisher discussed accident reporting and injury and illness prevention planning last month. Jim Floyd plans to invite Ross Fisher back later to provide details of how the process will work, including process flow and responsibilities. Having a designated resource person will be valuable.

Peer Review Status – Scott Robinson and Jim Floyd

ES&H Peer review, Technical Assurance Program, and Division Self-Assessment are the 3 parts of LBNL's assessment and assurance process. There is a March 2010 manual for the Peer Review process on the Office of Contract Assurance website. It provides step-by-step instructions.

The Division Director is the key stakeholder for Peer Reviews. The Division Director identifies about 2-3 key issues he/she would like the team to assess. The Peer Review for Materials Sciences has been finished. Peer Reviews are intended to look at high-level, Integrated Safety Management processes. Line Management owns the process.

The level of effort for a review includes 4 people on the review team. They may split up to look at different issues. They will typically spend a couple of hours on site, and conduct brief interviews. The total effort is about 8-16 hours. The process is focused on the selected issues. There are opening and closing meetings. Writing the report takes the most time. A Division designee (typically the Division Safety Coordinator) helps support the process and schedule interviews. Team members receive 1 hour training from OCA. Vito Mangiardi asked whether there is a follow-up process to determine whether improvement was achieved. The Division Director gives a follow-up presentation to SAC on the Division's response. Action items go into Issues Management for tracking. This new approach is still an evolving process. SAC directly approaches Division Directors to schedule reviews. The Division Safety Coordinator may have input into the process. There was a question about the report format. It is not in the Guide yet. Scott Robinson is helping with writing the reports, and he is using a format similar to the Division Self-Assessment reports. The output includes analysis, action items, and the path forward.

Jim Floyd is proposing that the frequency of reviews be risk-based rather than cyclical. In looking at which Divisions should be reviewed next, he first eliminated the Divisions that went through the intensive HSS review last year (Advanced Light Source, Chemical Sciences, Life Sciences, Physical Biosciences) and the ones that have gone through other recent audits (EHS, Facilities, Materials Sciences). He then eliminated the Divisions that have low risk operations (Computing Sciences, Genomics, Information Technology, Physics, Directorate/Operations). That leaves the following Divisions to be reviewed over the next 2 years: Accelerator and Fusion Research, EETD, Earth Sciences, Engineering, Nuclear Science. We would potentially need to draw upon expertise in about 18 subject areas. There was a question about whether it would be more effective to look at risk areas across the Lab. The TAP reviews take a horizontal slice approach. Jim Floyd recommended that we try the proposed process for 2 years and then look at how well it is working. SAC should be able to accomplish about 3 reviews per year. We should not try to do all the most complex Divisions the same year. Engineering Division management is in flux this year, and EETD is in the process of changing their safety organization. It is time to initiate discussions with Division Directors on possible review topics. Division Representatives should talk to their Division Directors. Jim Floyd and

Scott Robinson will identify review team leads. The other team members will be selected after the Division Directors select their review topics. Previous self-assessment reports will provide ideas for appropriate topics.

Access Control – Gita Meckel

There are 3 main elements to the Access Control program: software, hardware, and governance.

The core software technology is Quantum Secure. The system allows training requirements to be tied to location. The software has been modified to allow a many-to-many correspondence of training courses to locations. It is expected to go live October 25. Oakland Scientific Facility, Advanced Light Source, and the 88” Accelerator will be the first locations for access control system implementation.

The hardware task is to install card readers. In response to a Price Anderson Act violation corrective action, drawings have been prepared for active radiological areas. The work will be ready to go out for bid at the end of October. It will take a couple of months to go through the procurement and cost analysis processes. Meanwhile, LBNL plans to get started with installation in 15 locations, using in-house labor. A funding request has been submitted.

There are several key governance/policy issues to be decided. Where will the access control systems be required? What are the requirements for new Radioactive Materials Areas? Who owns and controls the system? Who pays for card reader installations? Who controls the system? How will it tie into the JHA and Work Planning and Control systems? An access control consultant is helping with some of these issues. We need an interim policy for Controlled Areas. There will be some debate about whether research projects should be required to pay for card readers. Some non-DOE funded research funding may not provide for this expense. It is not clear where the access control systems will be required – all sealed source areas? Instruments containing sealed sources? Areas with prompt radiation? Schedule for existing vs. new research areas? Control at building, room, or area level? There are some complex issues involved. There is some potential savings in training costs if only the people who enter controlled areas are required to complete General Employee Radiation Training. LBNL wants recommendations from the consultant about what other Labs are doing. We should focus on what problems we are trying to solve. We are starting with areas that already have badge readers. There are questions about requirements for custodians and maintenance workers that need to enter areas, but do not do research. The training needed for access will be different than the training needed to do work.

Lockout/Tagout Audit – Richard DeBusk

The LOTO incident investigation team includes Jim Dahlgard (team lead), Melanie Gravois (causal analyst), Tom Caronna (subject matter expert), and Bob Felicitas (lessons learned, human performance factors). The team looked at the Bldg. 76 incident in detail. They are finding problems with work planning and control, communication / human performance, and as-built drawings. Work packages do not provide sufficient information. Roles and responsibilities, particularly the authority to authorize the work, are not clear. Pre-job briefings have been informal, and not all workers are included. Workers who arrive after the briefing do not get all the information. Electrical work authorizations should address these issues. EHS has developed a new training method for Facilities personnel that asks them to find the errors in sample work packages.

There was a question about whether Subcontractor Job Hazards Analyses are not effective. Most of the incidents involved LBNL construction and maintenance personnel rather than subcontractors. LOTO requires an additional permit. Documents and work processes should be used as tools. The Human Performance Improvement (HPI) process is designed to identify performance criteria. Schedule pressure and safety culture seem to be recurring factors in the LOTO incidents.

Safety Culture Survey – Jim Floyd

The safety culture survey will allow tracking and comparison by 6 demographic factors: home/matrix division, location, job category, guest/employee, and years of experience at LBNL. The language in the survey has been tailored to LBNL. We will be able to produce Division-specific reports by job category. A website is being developed. Lee Aleksich will be helping with the project management. Responses will be anonymous. The survey will be conducted over a 2-week period. There will be a follow-up discussion on the data next month.

Rebecca Rishell from the Directorate was introduced and welcomed.

The meeting was adjourned at 12:00 PM

Respectfully submitted, Patricia M. Thomas, SAC Secretary