

Safety Advisory Committee

December 5, 2014

1:30 – 3:00 PM

Minutes

Committee Member	Representing	Present
V. Potapenko, M. O. Leimer, J. Willen	Human Resources Advisors	X
Blodgett, Paul M.	Environment, Health and Safety Division	
Bluhm, Hendrik	Chemical Sciences Division	
Chernowski, John	Facilities Division	
Christensen, John N.	Earth Sciences Division	X
Franaszek, Stephen	Genomics Division	
Giuntoli, Patricia	Computing Sciences Directorate	
Greiner, Leo	Nuclear Science Division	X
Haber, Carl - <i>Marty White for</i>	Physics Division	X
Martin, Michael C.	Advanced Light Source Division	X
MacGowan, Elizabeth	Computing Sciences & Information Technology	
Sauter, Nicholas	Physical Biosciences Division	X
Schmid, Andreas	Materials Sciences Division	X
Seidl, Peter	Accelerator Technology and Applied Physics Division; SAC Chair	X
Thomas, Patricia M.	Safety Advisory Committee Secretary	X
von der Lippe, Henrik	Engineering Division	
<i>vacant</i>	Environmental Energy Technologies Division	
<i>vacant - Scott Taylor for</i>	Life Sciences Division	

Others Present: Kim Abbott, Michael Carr, Stephanie Collins, Ken Fletcher, Michelle Flynn, Michael Kritscher, Robert Mueller, Martin Neitzel, Andrew Peterson, Jack Salazar, Aaron Ward, Bill Wells, Kat Wentworth,

Comments from the Chair – Peter Seidl

- **Meeting with Lab Director** has been rescheduled to January 8.
- **New people** – Betsy MacGowan will represent the Computing Sciences and Information Technology Divisions. Martin Neitzel will chair the Division Safety Coordinators Subcommittee.
- **Safety Advisory Committee role in electrical safety – SAC**
Representatives should communicate with their Division Directors about the impacts to their Divisions of the proposed changes to the electrical safety requirements. SAC Representatives can help Division Directors get the information they need to plan for Division implementation. EHS Division is relying on SAC to get accurate feedback, and to help get to acceptance of the need for changes. EHS Electrical Safety needs a point of contact to work with in each Division.

SAC Planning Discussion – Peter Seidl

The Safety Advisory Committee Charter needs to be updated to describe the ESH Peer Review process. SAC should plan to do about 2 Peer Reviews per year. There are several different ways SAC could identify candidate Divisions for Peer Review:

- If a Division Director requests a review, this would be a high priority. SAC Representatives should discuss this with their Division Directors.
- SAC could review all the Divisions on a rotating basis, but this might not be the best way to reduce risk. Chemical Sciences Division, Physics Division, and Advanced Light Source Division have not been reviewed since their 2006 Management of Environment, Safety, and Health (MESH) Reviews and might be good candidates for review.
- SAC could look at the history of recent safety incidents, but some Divisions are larger or have greater risks and/or responsibilities because of the nature of their work, so the incident history does not directly correlate with Division management issues. A Peer Review should be perceived as a useful tool for the Division Director, not a punishment. Facilities Division has experienced the most recent incidents; however, they were just reviewed and have not had time to respond. Materials Sciences Division (MSD) has the second highest rate of incidents. MSD was Peer Reviewed in 2010. The Work Planning and Control (WPC) system may resolve the issues that were identified – SAC could follow up after WPC implementation in late 2015 or 2016.
- SAC could also consider reviewing a group of Divisions with similar safety issues.

Peter Seidl will follow up and propose candidates for FY15 Peer Reviews.

ESH Documents Pipeline – Bill Wells

The safety policies in development that have had some change in status since the last meeting are the ones in green on the pipeline table. In addition, revisions to the Laser Safety Program are being drafted. Revisions to ESH Manual Chapter 6 describing the Work Planning and Control process will be added to the pipeline soon. Scott Robinson is working on a Pressure Safety flow chart.

Revision Type	Documents	Program/Policy	Significance	Status
Electrical Safety Program Major Revision	RPM, ESH Manual	Electrical Safety Program	A	Working group still reviewing and providing input.
Traffic Safety Program and Policy – Major Revision	RPM, ESH Manual	Traffic Safety Program	C	Final document is ready to publish. SME is finishing up implementation plan; needs working group sign off, and EHS leadership approval.
Construction Safety – Major Revision	ESH Manual	Construction Safety Program	C	EHS wants to modify the approach with this program, and model it after the Electrical safety Program to include a separate Construction Safety Manual. The work processes that direct workers to follow specific requirements will be moved to the Construction Safety Manual.
Hoisting and Rigging Program – minor change	ESH Manual	Hoisting and Rigging	E	Posted, remove from pipeline

Revision Type	Documents	Program/Policy	Significance	Status
Hoisting and Rigging Program – minor change	ESH Manual	Hoisting and Rigging	E	Roles and Responsibilities for Facilities and Engineering Division Representatives related to review and approval of engineering notes. SME submitted this to the Mechanical Engineering Safety (SAC) Subcommittee for review and comment.
Sharps Safety – New Policy and Program	RPM, ESH Manual	Sharps Safety	TBD	Waiting on significance analysis
Roof Access – New Policy and Program	RPM, ESH Manual	Roof Access	TBD	Waiting on significance analysis
Laser Safety Program Major Revision	ESH Manual	Laser Safety Program	TBD (C)	Laser safety committee has provided input and recommendations; SME is drafting.
Fall Protection Program Major Revision	ESH Manual	Fall Protection Program	TBD (C)	New requirements
OJT requirements, conditions for performing work without required training.	TBD	EHS Training Program/Policy	TBD	Description of OJT requirements for WPC. Divisions to determine methods.
Change to Radiation Safety Program – Conversion to Rad Con Manual format, and addition of new requirements from DOE O 458.1 CH. 2.	RPM/EHS Manual/Rad Con Manual	Radiation Safety, Environmental Radiation	D	RPG is working with the RSC on requirements, language and format of Rad Con manual. 7 Policies posted in RPM.

Revision Type	Documents	Program/Policy	Significance	Status
Pressure Safety and Cryogenics Program Major Revision	ESH Manual	Pressure Safety and Cryogenics Program	C	Working group finalizing changes to document; process flow diagram

Work Planning and Control Update – Andrew Peterson and Jack Salazar

The Work Planning and Control Activity Manager system was officially launched November 3. Users have provided feedback on some features of the database that need to be fixed. EHS is focusing on making critical improvements to ensure the basic features work. They are prioritizing other requested changes. LBNL is still working toward the April 30, 2015 target for transitioning work authorizations to Work Planning and Control. They are collecting metrics on usage. There are about 100 Activities in the system, mostly in the Developing status.

EHS will be proposing changes to ESH Manual Chapter 6 defining Work Planning and Control processes and responsibilities. These changes will affect everyone. Some policy issues may be brought to SAC for input.

As the WPC system is implemented, it will be evaluated to determine whether LBNL is getting value from the system – is it better than Job Hazards Analysis? Initial comment from Divisions indicates that we are getting more input on low-level hazards.

Electrical Safety Update – Robert Mueller

The proposed changes to the Electrical Safety Program will affect almost everyone. The changes will be in ESH Manual Chapter 8 and a new Electrical Safety Manual. Review teams have completed their review of the documents. There was a lot of feedback, but not all issues have been resolved. There is a subgroup that is reviewing all the comments through the end of December.

Divisions are beginning to appoint acting Electrical Safety Officers and/or Electrical Safety Advocates, as will be required by the proposed changes. The Electrical Safety Officers will meet weekly. Divisions should report the names of the people they have selected for the electrical safety roles to Mark Scott -- and also to Bob Mueller, if they are to be added to the Electrical Safety Subcommittee.

Most Division Directors are in the process of performing the electrical safety walkarounds requested by Paul Alivisatos. Engineering Division Director Kem Robinson has found his walkthroughs useful in gaining insight about the types of work being performed, workplace conditions, and impacts of the new requirements. Engineering Division found some concerns about over-reliance on interlock systems, and housekeeping in some areas. Bob Mueller is following up and developing a path forward.

A new Electrical Safety website has been developed and is available at: <http://electricalsafety.lbl.gov/> Anyone who has comments about the website should contact Stephanie Collins.

The website includes a link for requesting the services of a Qualified Electrical Worker (QEW) from Engineering Division. The requests will be monitored at all hours. Please be realistic when specifying the priority of requests and don't abuse the system. QEWs will come in to the Lab during off-hours if necessary. The estimate for doing the work is free, but Divisions need to provide an account number for the work. There is some concern that some researchers will not want to request a QEW if they have to pay for the services. There were questions about how to get assistance at remote locations with no QEW available.

There is a process for people to become QEWs. There has been some reluctance to apply for the qualification. People who can provide some evidence of appropriate education and/or experience in electrical work are generally being accepted as provisional QEWs. The required LBNL training courses are being developed and are not yet in JHAs or WPC. Workers will receive notices through the WPC "My Work" system if their requirements change.

There were questions about whether LBNL will have some type of apprentice program for people who need to gain experience to become qualified. They will be able work under the direct supervision of a QEW and receive on-the-job training. Just being a QEW does not authorize a person to do all types of electrical work. QEWs must also receive appropriate on-the-job training and be authorized through Work Planning and Control to work on specific equipment.

There were questions about the definition of "electrical work". Generally, it will be work at ≥ 50 volts or 5 mA. De-energized work on user serviceable parts of cord-and-plug equipment will not require a QEW.

Electronics Build Standards for designing and fabricating equipment are being developed. The standards will be accessible with an LDAP password and found under E on the LBNL A-Z index. Following the standards will help researchers in getting LBNL-fabricated equipment to pass inspection.

The revised ESH Manual Chapter 8 is expected to become official in March 2015. There will be an implementation period of about 1 year. SAC representatives are requested to meet with their Division Directors and provide feedback on the impacts of the proposed requirements. This is going to be LBNL's Electrical Safety Program, not just an EHS program imposed on the Lab, and all Divisions need to commit to implementing the program.

Integrated by Design – Andrew Peterson and Michelle Flynn

EHS, Facilities, and Protective Services are working together to take a life-cycle view of programs with responsibilities that extend across Divisions. The issues of off-site safety and services, safety alarms, and compressed gasses were identified from self-assessment findings. The off-site safety working group is looking at ergonomics (Kat Wentworth) and personal safety (Al Benitez). The safety alarms group is getting ready to start work. The compressed gas working group is developing a life-cycle flow chart of the processes involved in ordering, transporting, storing, using, and disposing of gas cylinders.

The meeting was adjourned at 3:00 PM
Respectfully submitted, Patricia M. Thomas, SAC Secretary