

Energy Technologies Area

2016 Self-Assessment Project 2

A Self-Assessment of Activity Manager System Implementation

May 27, 2016

Approved by:



Mary Sidney, ETA Deputy Director



Date



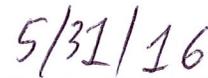
Robert Kostecki, ESDR Deputy Director



Date



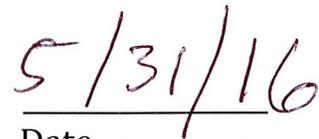
Alex Lekov, EAEI Deputy Director Operations



Date



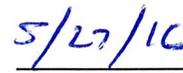
Rick Diamond, BTUS Deputy Director Operations



Date



Ron Scholtz, ETA Safety Manager



Date

Introduction

The Activity Manager Work Planning and Control system was recently implemented throughout LBNL. It replaced the old Job Hazards Analysis (JHA) and Activity Hazards Document (AHD) systems. The Environmental Technologies Area (ETA) was one of the first groups of divisions to fully implement the new Activity Manager system during 2015. It has now been approximately 1 year since many of the ETA Work Activities were developed and implemented.

Activity Leads are key personnel in the development and implementation of each Work Activity they are responsible for. The purpose of this self-assessment project is to determine how well the ETA Activity Leads understand and implement their responsibilities as Activity Leads, understand the Activity Manager system and if there are any areas of improvement that will make implementation more effective. The high level question is to determine if Activity Leads feel that they are qualified and capable of defining hazardous activities, training workers, and providing adequate oversight for those activities.

The ETA Safety Committee has selected Activity Manager System Implementation as a self-assessment project. In addition, the EHS Division had expressed an interest in partnering with ETA in this self-assessment. This is the second ETA self-assessment project for FY2016.

Requirements

Requirements for Work Planning and Control (WPC) and the Activity Manager system are described in the following documents:

- LBNL PUB-3000, Chapter 6, "Work Planning Control"
- Activity Manager database: <https://wpc-am.lbl.gov>
- ETA Integrated Safety Management (ISM) Plan

All work must be authorized before it is performed. Work authorization has two distinct components. First, the work activities must be planned, reviewed and authorized. Second, individual workers must be assigned to work activities, properly trained, and authorized before they can proceed with work. The primary Work Planning and Control (WPC) process used by ETA is called the "Activity Manager" system. In order to meet Integrated Management System principles, the Activity Manager system allows personnel to:

- Define the scope of work that will be performed
- Identify the hazards associated with the work
- Identify the controls necessary for the hazards
- Authorize the work activity
- Assign and authorize workers to perform the work activities

Project Leads are assigned to oversee all ETA work. The Project Leads are Managers, Principal Investigators, or Supervisors. Project Leads organize their work into Projects with one or more associated Work Activities. The Project Lead maintains overall control and responsibility for each Work Activity within their Project. Activity Leads are assigned for each Work Activity. They

define the work, identify the hazards, and implement the controls associated with the Work Activity. The Activity Lead also assigns and authorizes workers to perform work.

Work Activities are authorized following a risk-based approach. Work Activities involving low or moderate hazards (Level 1 and 2) are authorized by ETA line management. Work Activities involving higher hazards (Level 3) requires concurrence of the EH&S Division in addition to ETA line management authorization.

Workers are authorized by Activity Leads at a level commensurate with their knowledge and skill level given the particular hazards associated with their assigned Work Activity. Workers may be authorized to work under direct supervision only, to work unsupervised but not alone, or to work alone. Once assigned to a Work Activity, the worker will review, accept and follow the conditions and controls listed. The worker can perform work only for which they are authorized and qualified.

All ETA personnel are required to maintain a safe work area, work within their authorized scope of work, wear personal protective equipment when required, and complete required training. They must also report any safety issues immediately to their supervisor or Activity Lead for follow-up and corrective action.

Methodology

The following methodology was used to conduct this Activity Manager Implementation Self-Assessment:

1. Group meetings for Activity Leads were held with each ETA Division. The operations deputies from each division organized the meetings.
 - a. BTUS/EAEI- (March 29, 2016)
 - b. ESDR- (March 31, 2016)
 - c. ESDR- (April 4, 2016)
2. The following lines of inquiry were used during each group meeting for discussion. See Attachment 2 for a complete outline of introductory comments and lines of inquiry used by the self-assessment team.
 - a. What are your roles and responsibilities as an Activity Lead?
 - b. How do you interact with workers under your activities to ensure they are qualified to perform the work safely?
 - c. What skills, knowledge, or experience do you believe authorizes or qualifies you as an Activity Lead?
 - d. Do you have the needed authority and support to meet the roles and responsibilities of an Activity Lead?
 - e. Do you have the necessary time to perform the duties of an Activity Lead?
 - f. What are the most significant challenges you face as an Activity Lead?
 - g. What additional tools or support do you need to exercise your responsibilities as Activity Leads?
 - h. In what ways is Activity Manager a useful tool in ensuring a safe work area?

- i. How does Activity Manager help you identify hazards and controls needed for a safe work area?
3. A summary of the observations, noteworthy practices, and suggested improvements was compiled by the self-assessment team and is presented in this report.
4. The following personnel participated on the self-assessment team:
 - a. Ron Scholtz- ETA Safety Manager
 - b. Andrew Peterson- EHS Division
 - c. Mary Sidney- ETA Deputy Director
 - d. Robert Kostecki- ESDR Deputy Director of Operations
 - e. Alex Lekov- EAEI Deputy Director of Operations
 - f. Rick Diamond- BTUS Deputy Director of Operations
5. The scope of this self-assessment applies to ETA Work Activities. See Attachment 1 for a complete list of Work Activities and Activity Leads by division.
 - a. ETA Area Office (Levels 1,2,3)
 - b. ESDR (Levels 1,2,3)
 - c. EAEI (Levels 1,2,3)
 - d. BTUS (Levels 1,2,3)
6. The following are not included in the scope of this self-assessment:
 - a. Non-ETA Work Activities that ETA personnel may be assigned to.
 - b. Subcontractors working under the current sJHA process.
 - c. Cyclotron Road Division Work Activities.

Summary of Findings, Observations and Noteworthy Practices

The following is a summary of findings, observations, and noteworthy practices identified by the self-assessment team. Significant items identified in the findings section are each entered into the Corrective Action Tracking System "CATS" to ensure these are addressed and completion documented.

The group meetings were well attended by both Activity Leads and ETA division management. A total of 26 Activity Leads participated in the three group meetings held. Deputy Directors from each division also participated in each of the meetings.

Findings:

1. There were no findings or non-compliances identified as a result of this self-assessment.

Group Discussion Observations:

1. *What are your roles and responsibilities as an Activity Lead?*
 - a. There was a consensus that roles and responsibilities include:
 - i. Creating Work Activities in Activity Manager (defining work, selecting hazards, etc.)
 - ii. Oversight of working safely

- iii. On-boarding and on-the-job training for new workers
 - iv. Adding workers to the Work Activity and authorizing them (administrative staff felt this was the only responsibility for their activities)
 - b. All take their roles and responsibilities seriously.
 - c. Most did not review the Activity Manager training videos but instead relied on the Division Safety Coordinator to communicate requirements/expectations.
 - d. Some suggested embedding elements of Activity Manager within existing training materials.
 - e. Some questioned the difference between the roles and responsibilities of Activity Lead and that of Area or Lab Safety Lead (see Attachment 3).
 - f. Some questioned the difference between the “work alone” and the “work unsupervised but not alone” work authorization settings and how these relate to the LBNL “work alone” policy.
2. *How do you interact with workers under your activities to ensure they are qualified to perform the work safely?*
- a. Two interactions were commonly mentioned:
 - i. Orientation- provide some initial On the Job Training (OJT)
 - 1. For administrative activities, this was generally through an orientation checklist (face-to-face delivery)
 - 2. For lab work, this may include showing how to use equipment in addition to face-to-face orientation
 - ii. Observation- this is a continuous on-going activity
 - 1. If Activity Leads do not view a worker as competent, they are not authorized to work alone
 - b. Available time is a limiting factor in the quality of OJT and observation provided.
 - c. Either start new staff on days when the Activity Lead is in the lab or rely on more experienced senior staff to provide the orientation.
3. *What skills, knowledge, or experience do you believe authorizes or qualifies you as an Activity Lead?*
- a. Nothing too specific. Obvious choice due to current work assignment in lab area.
 - b. Person with the most experience.
4. *Do you have the needed authority and support to meet the roles and responsibilities of an Activity Lead?*
- a. A resounding YES for EAEI/BTUS group.
 - b. Roles need to be clearly defined.
5. *Do you have the necessary time to perform the duties of an Activity Lead?*
- a. Not enough time to provide continuous oversight. Need to rely on others.
 - b. Delegation to more senior staff is helpful.
 - c. People work before paper work.
 - d. Level of involvement varies by the activity.

- e. Priority is ensuring the safety of people over Activity Manager documentation when time is limited (people work > paper work).
 - f. New workers coming into lab for a short period of time or performing a very specific task.
 - g. Affiliates need a lot of extra follow-up. We need a tutorial for them on how to use Activity Manager and the importance of reviewing the contents of the Work Activity.
 - h. Discussion about the role of the Activity Lead and it being limited to interfacing with Activity Manager while the Lab Safety Lead is responsible for safety in the lab area.
6. *What are the most significant challenges you face as an Activity Lead?*
- a. Getting affiliates to accept their Work Activity assignment (hand holding)
 - b. Does not really force the sign/counter-sign interaction that the JHA system had.
 - c. Available time to complete the responsibilities.
 - d. System notifications seem to be an issue. The notifications are not always clear and can be confusing. They can be too numerous as well. The “action required” vs. “information only” messages need a different level of priority. Need hyperlinks in emails.
 - e. Adding/modifying Work Activities not always straight forward.
 - f. No way of knowing someone has read and understood the Work Activity when accepting their assignment.
 - g. Keeping on top of what everyone is doing.
 - h. Much of the training is one-time only and is completed in the first few weeks. Much of the content is forgotten over time. Need periodic reminders of important points.
 - i. People working off-hours or working alone but the Activity Lead/Lab Safety Lead is not aware.
7. *What additional tools or support do you need to exercise your responsibilities as Activity Leads?*
- a. Recognition of the Activity Lead’s efforts through a mechanism such as the Performance Management Process (PMP).
 - b. Clarification of the roles and Responsibilities for both the Activity Leads and the Lab Safety Leads.
 - i. Designating a specific Lab Safety Lead may actually have negative consequences. It delegates responsibility to this person and is no longer the Activity Lead’s responsibility.
 - ii. Incorporate the top three bullets in the Lab Safety Lead roles responsibility in the ETA ISM Plan. Make it clear that the remaining items are everyone’s responsibility.
 - c. A standardized method for documenting OJT.
8. *In what ways is Activity Manager a useful tool in ensuring a safe work area?*
- a. Identifies specific hazards and controls associated with the identified task.
 - b. Identifies OJT requirements.

9. *How does Activity Manager help you identify hazards and controls needed for a safe work area?*
- Work Activities separated out by types of tasks being performed. There can be different hazards/controls for each.
 - Need to find a “happy medium” of too many Work Activities vs. Work Activities that are too generic.
 - New workers get an initial review of Work Activity requirements, but there is not enough focus on day-to-day activities.

Noteworthy Practices:

- Most all of the Activity Leads provide some form of On the Job Training to new workers. However, the OJT is not normally documented except when required (laser or radiation authorizations). These forms are uploaded into the attachments section.
- Each ETA Work Activity includes a training section that outlines what should be included in OJT. However, many Activity Leads did not seem to use the outline as a guideline when providing training.
- One group maintains a separate “Wiki” sheet detailing weekly experimental status. They also maintain a spreadsheet listing types of equipment used and status. There is an opportunity to link this valuable information with Activity Manager.
- At least one Activity Lead indicated that they sit down with each new worker and quizzes them on important parts of the Work Activity to ensure they read and understood. They also go over the Work Activity document on-line.

Conclusions and Future Improvements

Conclusions

The following conclusions summarize the results of the ETA Activity Manager Implementation self-assessment project:

- On the Job Training is being consistently provided by Activity Leads although it is not always standardized or documented.
- There is a consistent concern about the amount of time needed to properly train a new worker and lack of time available to the Activity Lead to perform this task.
- Activity Lead and Lab Safety Lead roles are confusing and need to be better defined.
- New workers are not always familiar with the Activity Manager system and the importance of the requirements listed in each Work Activity.
- Activity Leads are not always familiar with their roles and responsibilities as Activity Lead or on how to use the Activity Manager system. The on-line videos on the WPC website are not being used as a source of information and do not include any information on Activity Lead roles and responsibilities.

Recommendations and Suggested Future Improvements

The following recommendations and improvements should be made in order to enhance implementation of the Activity Manager system in ETA:

1. Develop a more formalized Activity Lead training course. It should include roles and responsibilities in addition to how the Activity Manager system works. The Activity Leads stated a preference to an on-line course rather than classroom.
2. Develop an ETA-specific new hire orientation course. This course should include an orientation to the importance of Work Activities and how to access/use the Activity Manager system. It should also include daily ISM, working within scope, recognizing and responding to changing work scope, working alone, and reporting safety issues.
3. Develop division expectations for OJT to ensure more consistency across the division.
4. Develop a plan to ensure that Activity Leads and Lab Safety Leads are recognized for their efforts. This should be included as part of the annual performance review process.
5. Upgrade Activity Manager system notifications so that messages are clearer and hyperlinks are included (EHS).
6. Clearly define the Lab Safety Lead and Activity Lead roles in the ETA Integrated Safety Management Plan. Communicate these roles to all those assigned. Implement the draft Work Activity for Lab Safety Leads to ensure all are properly trained on their responsibilities.
7. Update existing Level 3 Work Activities to better define daily ISM, work alone, and side work requirements in the description of work. (Completed)
8. The results of this self-assessment will be made available to all ETA personnel so that they are aware of issues identified and future plans (**Completed**- Posted on ETA Safety website and announced in division communications).

ATTACHMENT 1

List of ETA Work Activities and Activity Leads

ETA Office

Project Name	Project ID	Project Lead	Activity Name	Risk Level	Activity Lead Assigned
ETA Operations	P-AD-001	Jerri Carmo	ETA Electrical Safety Officer (EDE-0155)	3	Ari Harding
			LIGTT (EE-0043)	1	John Elam
			ETA Administrative/Management (EE-0011)	1	Jerri Carmo
			ETA Lab Area Safety Lead (EE-0114)	1	Ron Scholtz
			ETA Safety Coordinator (EE-0028)	2	Ron Scholtz
			ETA Building Manager (AD-0001)	1	Susan Synarski

ESDR

Project Name	ID #	Project Lead	Activity Name	Risk Level	Activity Lead Assigned
ESDR Electrochemistry Battery Research (V. Battaglia)	P-ED-006	Vince Battaglia	Electrode Fabrication (EE-0024)	3	Yanbao Fu
			Cell Assembly (EE-0025)	3	Yanbao Fu
			Cell Testing (EE-0026)	1	Yanbao Fu
			Materials Characterization (EE-0027)	3	Xiangyun Song
			Nitric Acid Waste Treatment (EE-0094)	3	Xiangyun Song
ESDR Electrochemistry Battery Research (E. Cairns)	P-ED-009	Elton Cairns	Electrode Fabrication (EE-0072)	3	Yoon Hwa
			Cell Assembly (EE-0073)	3	Yoon Hwa
			Cell Testing (EE-0074)	1	Yoon Hwa
			Materials Characterization (EE-0075)	2	Yoon Hwa
			Tube Furnace (ED-0003)	2	Yoon Hwa

Project Name	ID #	Project Lead	Activity Name	Risk Level	Activity Lead Assigned
ESDR Electrochemistry Battery Research (N. Balsara)	P-ED-011	Nitash Balsara	Graphene Oxide Synthesis (ED-009)	2	Ayako Kawase
			Electrode Fabrication (EE-0069)	3	Mahesh Bhatt
			Cell Assembly (EE-0070)	3	Mahesh Bhatt
			Cell Testing (EE-0071)	1	Mahesh Bhatt
ESDR Electrochemistry Battery Research (M. Doeff)	P-ED-012	Marca Doeff	Electrode Fabrication (EE-0047)	2	Chixia Tian
			Cell Assembly (EE-0048)	3	Chixia Tian
			Cell Testing (EE-0049)	1	Chixia Tian
			Synthesis of Electrode and Ceramic Electrolyte Powders (EE-0051)	3	Chixia Tian
			Phillips XRD 62-145-3 for System Supervisors (EE-0106)	3	Yuyi Li
			Use of Phillips Diffractometer (EE-0107)	2	Yuyi Li
			Nitric Acid Waste Neutralization (EE-0095)	3	Marca Doeff
			A Guide to Materials Characterization (EE-0130)	1	Yuyi Li
			Scanning Electron Microscopy (EE-0127)	2	Yuyi Li
			Pressure Reactor Vessel (ED-0006)	3	Marca Doeff
ESDR Electrochemistry Battery Research (G. Chen)	P-ED-014	Guoying Chen	Materials Synthesis (EE-0038)	3	Saravanan Kuppan
			Electrode Fabrication (EE-0040)	3	Saravanan Kuppan
			Cell Assembly (EE-0041)	3	Saravanan Kuppan
			Cell Testing (EE-0042)	1	Saravanan Kuppan
			Nitric Acid Waste Treatment (EE-0110)	3	Saravanan Kuppan

Project Name	ID #	Project Lead	Activity Name	Risk Level	Activity Lead Assigned
			Powder XRD for Battery and Fuel Cell Studies (EE-0130)	2	Yuyi Li
			Powder XRD for System Supervisors (EE-0131)	3	Yuyi Li
			Pressure Reactor Vessel (ED-0007)	3	Guoying Chen
ESDR Electrochemistry Battery Research (W. Tong)	P-ED-013	Wei Tong	Electrode Fabrication (EE-0029)	3	Wei Tong
			Cell Assembly (EE-0030)	3	Wei Tong
			Cell Testing (EE-0031)	1	Wei Tong
			Materials Characterization (EE-0135)	1	Wei Tong
			Material Synthesis (EE-0033)	3	Wei Tong
			Nitric Acid Waste Treatment (EE-0118)	3	Wei Tong
ESDR Electrochemistry Battery Research (B. McCloskey)	P-ED-015	Brian McCloskey	Cell Fabrication and Testing (EE-0054)	3	Hilda Buss
			Organic Synthesis (EE-0112)	3	Hilda Buss
			Materials Characterization (EE-0056)	2	Hilda Buss
			General Chemistry (EE-0034)	2	Lydia Terborg
ESDR Electrochemistry Battery Research (R. Kostecki)	P-ED-007	Robert Kostecki	Materials Preparation and Electrochemical Testing (EE-0035)	3	Lydia Terborg
			Laser Spectroscopy and Microscopy (EE-0037)	3	Lydia Terborg
			Materials Characterization (EE-0036)	2	Lydia Terborg
			Nitric Acid Waste Treatment (EE-0096)	3	Lydia Terborg
			FTIR Spectroscopy (ED-0008)	2	Lydia Terborg
			Custom Cell Assembly (EE-0058)	3	Kenneth Higa

Project Name	ID #	Project Lead	Activity Name	Risk Level	Activity Lead Assigned
Electrochemistry Battery Research (V. Srinivasan)			Cell Testing (EE-0059)	1	Kenneth Higa
			Mechanical Testing (EE-0086)	2	Kenneth Higa
			Computational Research (EE-0141)	1	Kenneth Higa
			Nitric Acid Waste Treatment (EE-0098)	3	Kenneth Higa
			Sample Preparation (ED-0002)	2	Kenneth Higa
			Vanadium Batteries	2	Kenneth Higa
ESDR Lighting and Battery Research (G. Liu)	P-ED-008	Gao Liu	Electrode Fabrication (EE-0064)	3	Min Ling
			Cell Testing (EE-0065)	1	Min Ling
			Materials Synthesis (EE-0066)	3	Min Ling
			Pressure Reactor (ED-0013)	3	Tianyue Zheng
			Materials Characterization and Diagnostics (EE-0061)	2	Ahmet Kusoglu
			Fuel Cell Testing and Assembly (EE-0063)	2	Michael Tucker
ESDR Fuel Cell Diagnostics (A. Weber)	P-ED-005	Adam Weber	Gas Permeation Experimentation (EE-0111)	3	Meron Tesfaye
			Nitric Acid Waste Treatment (EE-0099)	3	Ahmet Kusoglu
			Computational Studies (EE-0121)	1	Adam Weber
			Solid Oxide Fuel Cells (EE-0122)	2	Michael Tucker
			Flow Battery Testing (EE-0125)	3	Michael Tucker
			Operation of MOS Laser (ED-0154)	3	Peter Dudenas
			Grid Integration Researcher (EE-100)	1	Janie Page
			Operation and Alignment of Class IV and IIIb Lasers (EE-0067)	3	Xianglei Mao
			Radiative Isotope Analysis (EE-0068)	3	Xianglei Mao
ESDR Grid Integration (M. Stadler)	P-ED-001	Michael Stadler			
ESDR Advanced Laser Technologies (V. Zormpa)	P-ED-004	Vaseilia Zormpa			

Project Name	ID #	Project Lead	Activity Name	Risk Level	Activity Lead Assigned
			Xradia X-Ray for System Supervisors (EE-0087)	3	Xianglei Mao
			Ion Trap-Time-of Flight Mass Spectrometry (EE-0088)	1	Xianglei Mao
			General Lab Activities (EE-0115)	2	Xianglei Mao
			Neutralization of Mixed Nitric Acid Waste (EE-0097)	3	Xianglei Mao
			Xradia X-Ray for System Users (EE-0126)	3	Xianglei Mao
ESDR Computational Studies of Electrochemical Systems (K. Persson)	P-ED-002	Kristin Persson	Computational Studies of Electrochemical Systems (EE-0142)	1	Kristin Persson
ESDR Non-Laboratory Workers	P-ED-003	Katherine Britton	ESDR Administrative Worker (EE-0009)	1	Katherine Britton

EAEI

Project Name	Project Number	Project Lead	Activity Name	Risk Level	Activity Lead Assigned
EAEI Appliance Performance Standards	P-EA-002	Greg Rosenquist	Appliance Standards Researcher (EE-0044)	1	Henry Willem
			Appliance Standards Technician (EE-0045)	3	Yi Qu
EAEI Indoor Environmental Quality	P-EA-003	Brett Singer	IEQ Wet Chemistry Research (EE-0103)	2	Randy Maddalena
			IEQ General Experimental Research (EE-0134)	2	Brett Singer

				Chlorine Gas Research (EE-0146)	3	Marion Russell
				Operation of ASE 200 (EA-0002)	3	Marion Russell
EAEI Atmospheric Aerosol Research	P-EA-006	Tom Kirchstetter		Atmospheric Aerosol Research (EE-0102)	3	Tom Kirchstetter
EAEI Atmospheric Biogeochemistry	P-EA-004	Marc Fischer		Atmospheric Biogeochemistry (EE-0101)	2	Marc Fischer
EAEI Appropriate Technologies	P-EA-005	Vi Rapp		Cook Stove Lab (EE-0104)	2	Vi Rapp
EAEI Non-Laboratory Workers	P-EA-001	Katie Kirbus		EAEI Administrative Workers (EE-0014)	1	Katie Kirbus
				EAEI Non-Laboratory Researcher (EE-0015)	1	Katie Kirbus

BTUS

Project Name	Project ID	Project Lead	Activity Name	Risk Level	Activity Lead Assigned
BTUS FLEXLAB (Regnier)	P-BU-002	Ari Harding	FLEXLAB Technician (EE-0004)	3	Ari Harding
BTUS Electronics and Dry Lab	P-BU-003	Richard Diamond	FLEXLAB Researcher (EE-0007)	1	Ari Harding
BTUS Combustion Laboratory (Therkelsen)	P-BU-006	Peter Therkelsen	Electronics and Dry Lab (EE-0077)	1	Richard Diamond
			Combustion Laboratory Laser Research (EE-0081)	3	Peter Therkelsen
			Combustion Laboratory Non-Laser Research (EE-0082)	3	Peter Therkelsen
			Combustion Laboratory Machine Shop (EE-0119)	1	Peter Therkelsen
BTUS Windows and Envelope Materials	P-BU-005	Howdy Goudey	Windows and Envelope Materials Full Access (EE-0139)	2	Howdy Goudey

Energy Technologies Area

Activity Manager Self-Assessment

(Goudey)			Windows and Envelope Materials Machine Shop (EE-0138)	1	Howdy Goudey
			Windows and Envelope Materials Limited Access (EE-0080)	1	Howdy Goudey
BTUS Non-Laboratory Workers	P-BU-001	Erin Harbin	BTUS Administrative Workers (EE-0016)	1	Erin Harbin
			BTUS Non-Laboratory Researcher (EE-0017)	1	Erin Harbin
Optical Properties of Building Materials (Levinson)	P-BU-004	Ronnen Levinson	Optical Properties of Building Materials (EE-0137)	1	Ronnen Levinson

ATTACHMENT 2

Lines of Inquiry Work Sheet

High Level Question:

Are Activity Leads qualified and capable of defining hazardous activities, training workers and providing adequate oversight for those activities?

Introductory Comments (Optional):

- Conversation consists of the below questions and will be no more than 1 hour in length.
- We'll be taking notes as part of the data collection. Responses will be reported by role.
- Limit response to experience since you've been an Activity Lead.
- Please be honest with your responses. Our division is interested in finding areas for improvement in our safety program.
- For Group Interviews: If you have a different answer to a question than others in the room, we want to hear from you. Not looking for consensus.
- Do you have any questions before we get started?

Lines of Inquiry

1. What are your roles and responsibilities as an Activity Lead?
2. How do you interact with workers under your activities to ensure they are qualified to perform work safely?
3. What skills, knowledge or experience do you believe authorizes or qualifies you as an Activity Lead?
4. Do you have the needed authority and support to meet the roles and responsibilities of an Activity Lead?
5. Do you have the necessary time to perform the duties of an Activity Lead?
6. What are the most significant challenges you face as an Activity Lead?
7. What additional tools or support do you need to exercise your responsibilities as ALs?
8. In what ways is Activity Manager a useful tool in ensuring a safe work area?
9. How does Activity Manager help you identify hazards and controls needed for a safe work area?

ATTACHMENT 3

ETA ISM Plan Activity Lead and Lab Safety Lead Roles and Responsibilities (CURRENT)

Work Activity Lead

- Assigned by the Project Lead (Principal Investigator or Supervisor) to oversee work being performed. The work can be defined by a specific work area and/or by types of equipment or processes used.
- Develop assigned Work Activities in the Activity Manager system. This includes the preparation of a statement of work outlining the scope of the activity, determination of the hazards associated with the work, and designating the controls needed to mitigate the hazards.
- Update assigned Work Activities as needed to ensure they reflect the work being performed.
- Assign workers to Work Activities. This includes establishing the work authorization levels based on the worker's level of competence and hazards of the work being performed:
 - Not Authorized to Work
 - Work with Supervision
 - Work Unsupervised But Not Alone
 - Work Alone
- Determine what On the Job Training (OJT) is needed and prepare assigned workers to safely carry out the defined scope of work.
- Ensure all supplemental work authorizations are obtained and maintained. This includes radiation work authorizations, laser work authorizations, and hot work permits.
- Communicate any changes in Work Activity scope, hazards, or controls to all affected workers.

Lab Safety Leader

- Ensures that day-to-day work activities in assigned technical work areas are conducted safely and within established work authorizations.
- Ensures that employees working within their assigned work areas are aware of work hazards and controls. This includes use of personal protective equipment, engineering controls (hoods and glove boxes), and emergency procedures.
- Report any health or safety concerns identified to their supervisor.
- Ensure that the door Hazard Placard information is up to date.
- Ensure that any Satellite Accumulation Areas (SAA) for hazardous wastes generated in their work areas are properly maintained.
- Ensure that hazardous materials located in the area are properly stored.
- Ensure that the chemical inventory entered into the Chemical Management System (CMS) is updated regularly.
- Ensure the technical area is well maintained and good housekeeping is being followed.
- Ensure that personnel protective equipment such as safety glasses, gloves, and lab coats are made available to workers in the area.
- Ensure that all equipment is properly maintained in a safe condition. Any defective equipment just is placed out of service until repaired.
- Ensure that emergency equipment in the area is available and maintained. This includes chemical spill supplies. Emergency Response Guide, emergency shower/eyewash, and fire extinguisher.

ATTACHMENT 4
Self Assessment Group Meeting Attendance

3/29/16

Houdey Goudey	BTUS Activity Lead/Project Lead
Yi Qu	EAEI Activity Lead
Tom Kirchstetter	EAEI Activity Lead/Project Lead
Marion Russell	EAEI Activity Lead
Erin Harbin	BTUS Activity Lead
Peter Therkelsen	BTUS Activity Lead/Project Lead
Andrew Peterson	EHS Division
Alex Lekov	EAEI Deputy Division Director
Marc Fisher	EAEI Activity Lead/Project Lead
Ari Harding	BTUS Activity Lead
Rick Diamond	BTUS Deputy Division Director
Mary Sidney	ETA Area Deputy Director
Ron Scholtz	ETA Division Safety Coordinator

3/31/16

Wei Tong	ESDR Activity Lead
Xiangyun Song	ESDR Activity Lead
Yoon Hwa	ESDR Activity Lead
Saravanan Kuppan	ESDR Activity Lead
Yanbao Fu	ESDR Activity Lead
Ayako Kawase	ESDR Activity Lead
Chixia Tian	ESDR Activity Lead
Robert KostECKI	ESDR Deputy Division Director
Andrew Peterson	EHS Division
Ron Scholtz	ETA Division Safety Coordinator

4/4/16

Kenneth Higa	ESDR Activity Lead
Ahmet Kusoglu	ESDR Activity Lead
Lydia Terborg	ESDR Activity Lead
Xianglei Mao	ESDR Activity Lead
Peter Dudenas	ESDR Activity Lead
Adam Weber	ESDR Activity Lead/Project Lead
Katherine Britton	ESDR Activity Lead
Janie Page	ESDR Activity Lead
Mike Tucker	ESDR Activity Lead
Robert KostECKI	ESDR Deputy Division Director
Mary Sidney	ETA Area Deputy Director
Andrew Peterson	EHS Division
Ron Scholtz	ETA Division Safety Coordinator