

Activity ID	CAP Action Items	Responsible Person	Start	Finish	FY2006				FY2007				FY2008
					Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
<b>LBNL ES &amp; H Corrective Action Plan</b>													
<b>CA Category #1 - Line Management Execution of ES &amp; H</b>													
<b>Root Cause 1.1.3</b>													
1.1.3	Root Cause 1.1.3 - Line management accountability for enforcement of safety practices and procedures is less than adequate												
1.1.3.01a	Define line management and their roles and responsibilities in the appropriate section of the RPM.	Chu	01-Jun-06*	30-Aug-06									
1.1.3.01b	Define safety roles and responsibilities for line management in Chapter 1 of PUB 3000	Hatayama	01-Jun-06	30-Aug-06									
1.1.3.02	Obtain SRC concurrence for policy changes to line management definition and roles and responsibilities.	Chu	31-Aug-06	13-Oct-06									
1.1.3.03	Revise the current mandatory PRD ES&H evaluation criteria for managers to reflect changes in PUB 3000.	Chu	16-Oct-06	30-Oct-06									
1.1.3.04a	Provide a template for Division ISM plans that will enable Divisions to upgrade ISM Plans to reflect changes in PUB 3000.	Hatayama	31-Oct-06	30-Nov-06									
1.1.3.04b	Divisions develop ISM plans that will enable them to meet new guidance of PUB 3000.	Chu	01-Dec-06	15-Jan-07									
1.1.3.05	Revise the Division Self Assessment Criteria for 2007 to reflect new guidance in PUB 3000.	Krupnick	02-Oct-06*	02-Jan-07									
1.1.3.06	Evaluate the effectiveness of the changes of PUB 3000 regarding roles and responsibilities for line management in the 2007 Division Self Assessment.	Krupnick	03-Jan-07	28-Sep-07									
<b>Root Cause 6.3.1</b>													
6.3.1	Root Cause 6.3.1 - Lab policies do not specify frequency of facility inspections and training of those responsible is lacking.												
6.3.1.01	Revise the requirement for management walk-arounds in Chapter 1 of PUB 3000	Hatayama	01-Jun-06*	18-Aug-06									
6.3.1.02	Develop and deliver safety walk-around training (EHS-27)	Hatayama	17-Apr-06 A	29-Jun-06									
6.3.1.03	Assess effectiveness of safety walk-arounds and present results to the SRC.	Krupnick	01-Jun-06*	30-Nov-06									

- Remaining Level of Effort
- Critical Remaining ...
- WBS Summary Bar
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Activity ID	CAP Action Items	Responsible Person	Start	Finish	FY2006				FY2007				FY2008	
					Q2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1		
6.3.1.04	The SRC will review the effectiveness of improvements in line management walk-arounds (including the effectiveness of EHS-27) and direct additional actions as needed.	Lucas	01-Jun-06	30-Nov-06										
<b>CA Category #2 - ES &amp; H Assurance Mechanisms</b>			02-Jan-06 A	28-Sep-07										
<b>Root Cause 2.1.1</b>			01-May-06 A	28-Sep-07										
2.1.1	Root Cause 2.1.1 - Not all EH&S Division technical programs include regular, required inspections of the workplace, work activities, or facilities.													
2.1.1.01	Determine and document which efforts that are underway in support of 10 CFR 851 implementation address root cause 2.1.1 (e.g. one existing task is to "develop program validation methodology").	Hatayama	01-May-06 A	14-Jul-06										
2.1.1.02	Solicit and document feedback on existing instructions and techniques from Division Safety Coordinators and EH&S Liaisons.	Krupnick	22-May-06*	16-Jun-06										
2.1.1.03	Survey EH&S Group Leaders/Technical Leads to determine baseline of EH&S assurance systems for technical programs.	Krupnick	07-Jun-06*	05-Jul-06										
2.1.1.04	Catalog EH&S programs' assurance system: survey of GL/Technical Leads	Krupnick	07-Jun-06*	05-Jul-06										
2.1.1.05	Develop Assurance Systems for EH&S Technical Programs.	Hatayama	06-Jul-06	15-Sep-06										
2.1.1.06	Document enhanced and/or newly develop EH&S Technical Program Assurance Systems, ES&H Self Assessment Program, PUB 5344.	Krupnick	18-Sep-06	29-Sep-06										
2.1.1.07	Validate effectiveness of enhanced / newly developed EH&S Technical Program assurance systems.	Krupnick	03-Aug-06*	28-Sep-07										
<b>Root Cause 2.1.2</b>			01-Mar-06 A	02-Apr-07										
2.1.2	Root Cause 2.1.2 - Self-assessment inspection instructions and techniques require improvement.													
2.1.2.01	Solicit and document feedback on existing instructions and techniques and on January walk-throughs from Division Safety Coordinators and EH&S Liaisons.	Krupnick	22-May-06*	16-Jun-06										

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					Q2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1
2.1.2.02	Compile lessons learned (including noteworthy practices) on January 2006 walk-throughs.	Krupnick	09-Jun-06*	23-Jun-06								
2.1.2.03	Determine requirements for additional documents, as required.	Krupnick	26-Jun-06	21-Jul-06								
2.1.2.04	Determine requirements for training, as deemed necessary.	Hatayama	26-Jun-06	21-Jul-06								
2.1.2.05	Incorporate feedback and results from actions 1-3 into the following documents and training:	Hatayama	24-Jul-06	29-Sep-06								
2.1.2.05a	Environment, Safety, and Health Self Assessment Program, PUB-5344	Hatayama	24-Jul-06*	29-Sep-06								
2.1.2.05b	Tools and procedures for conducting Division ES&H Self-Appraisals, PUB-3105	Hatayama	24-Jul-06*	29-Sep-06								
2.1.2.05c	ES&H Self-Assessment Training	Hatayama	24-Jul-06*	29-Sep-06								
2.1.2.06	Develop additional training as appropriate.	Hatayama	24-Jul-06*	22-Dec-06								
2.1.2.07	Revise IFA and MESH protocols for FY06.	Krupnick	01-Mar-06 A	24-May-06 A								
2.1.2.08	Assess effectiveness of revised IFA and MESH protocols.	Krupnick	01-Nov-06*	30-Nov-06								
2.1.2.09	Revise division self-assessment criteria based on Lab policy.	Krupnick	03-Jul-06*	02-Jan-07								
2.1.2.10	Revise Partnership Agreement between LBNL and UCB, ensuring consistency with Lab policy.	Chu	02-Oct-06*	02-Apr-07								
<b>Root Cause 5.1.3</b>			<b>02-Jan-06 A</b>	<b>16-Aug-07</b>								
5.1.3	Root Cause 5.1.3 - The current assessment and performance evaluation processes for work authorizations, particularly AHDs is less than adequate.											
5.1.3.01	Revise IFA guidance to focus on formally authorized work in the assessed division.	Krupnick	02-Jan-06 A	22-May-06 A								
5.1.3.03	Solicit feedback from Group Leaders and Division Safety Coordinators to determine merits of liaisons performing IFAs of other divisions.	Krupnick	07-Jun-06*	05-Jul-06								
5.1.3.04	Provide input for AHD database upgrades to enhance Division Self-Assessment validation process.	Krupnick	07-Jun-06	10-Jul-06								

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					Q2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1
5.1.3.05	Incorporate recommendations from Root Cause above in AHD database.	Hatayama	11-Jul-06*	04-Oct-06								
5.1.3.06	Incorporate AHD database upgrades into FY07 SA validation	Krupnick	14-Jul-06*	16-Aug-07								
<b>Root Cause 7.1.3</b>			02-Jan-06 A	19-May-06 A								
7.1.3	Root Cause 7.1.3 - Corrective actions to address inconsistent adherence to work planning and authorization policies are often delayed due to non-identification of task master.											
7.1.3.02	Developed Corrective Action Tracking System (CATS)	Krupnick	02-Jan-06 A	19-May-06 A								
<b>CA Category #3 - Educating Managers, Supervisors and ...</b>			01-May-06 A	11-Oct-07								
<b>Root Cause 3.1.1</b>			16-Oct-06	11-Oct-07								
3.1.1	Root Causes 3.1.1 - The need for training of line managers to effectively carry out their safety oversight responsibilities has not been effectively analyzed.											
3.1.1.02a	Establish the need, scope, requirements of line manager safety oversight training.	Hatayama	16-Oct-06*	10-Nov-06								
3.1.1.02b	Perform a Gap Analysis on oversight training requirements. Document Findings.	Hatayama	16-Oct-06*	10-Nov-06								
3.1.1.02c	Review existing LBNL policy regarding line manager safety oversight training requirements and revise training as required	Chu	13-Nov-06*	18-Dec-06								
3.1.1.02d	Establish training course evaluation process that measures the effectiveness and quality of not only each class taught but periodically of the course /program	Hatayama	19-Dec-06	15-Mar-07								
3.1.1.02e	Establish retraining/refreshers training interval criteria for safety training courses	Hatayama	16-Mar-07*	12-Apr-07								
3.1.1.02f	Develop training schedule. Train new and exiting staff as required.	Hatayama	13-Apr-07	11-Oct-07								
<b>Root Cause 3.1.2</b>			01-May-06 A	02-Aug-07								
3.1.2	Root Cause 3.1.2 - The role of safety coordinator varies across LBNL. The minimum qualifications and training of safety coordinators is not determined and formalized.											
3.1.2.01	Determine and formalize roles and responsibilities for safety coordinators across LBNL. Update Pub 3000	Chu	01-May-06 A	20-Oct-06								

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					Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
3.1.2.02a	Review qualifications of all safety coordinators against new requirements	Chu	23-Oct-06	17-Nov-06											
3.1.2.02b	Analyze, determine and formalize minimum training for safety coordinators	Chu	23-Oct-06	17-Nov-06											
3.1.2.02c	Develop training course(s) for Safety Coordinators	Hatayama	20-Nov-06	15-Feb-07											
3.1.2.02d	Initiate training for all coordinators (as necessary)	Hatayama	16-Feb-07	10-May-07											
3.1.2.02e	Review effectiveness of training and recommend changes as necessary	Krupnick	11-May-07	02-Aug-07											
<b>Root Cause 4.1.1</b>			01-Jun-06	01-Nov-06											
4.1.1	Root Cause 4.1.1 - Management's written and verbal safety communications program does not effectively communicate management concerns for quality workmanship, safety, and protection of the environment.														
4.1.1.01a	Review and evaluate existing management safety communications plan and revise as necessary.	Chu	01-Jun-06*	30-Jun-06											
4.1.1.01b	Initiate and verify or establish new requirements for the management safety communications plan.	Chu	03-Jul-06	31-Aug-06											
4.1.1.01c	Develop/ revise management safety communications plan.	Chu	01-Sep-06	04-Oct-06											
4.1.1.01d	Develop management communications program based on new/ revised plan.	Chu	05-Oct-06	01-Nov-06											
<b>Root Cause 7.1.2</b>			01-Jun-06	27-Oct-06											
7.1.2	Root Cause 7.1.2 - Adherence to the existing work control program is less than adequate and communication by managers of the requirement and the value of compliance needs reinforcement.														
7.1.2.01	Review the results of the 2005 and 2006 IFAs and MESH reviews to identify aspects of the work control that are not being effectively implemented.	Hatayama	01-Jun-06*	29-Sep-06											

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Activity ID	CAP Action Items	Responsible Person	Start	Finish	FY2006				FY2007				FY2008	
					Q2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1		
7.1.2.02	Develop a plan to improve training of individuals responsible for formal authorization documents and the communication of formal authorization requirements to staff and students.	Hatayama	01-Jun-06*	29-Sep-06										
7.1.2.03	Present Plan to the SRC for concurrence and initiate.	Hatayama	02-Oct-06	27-Oct-06										
<b>CA Category #4 - Proactive Posture on ES &amp; H</b>			15-Mar-06 A	28-Sep-07										
<b>Root Cause 3.2.1</b>			01-Jun-06	29-Jun-07										
3.2.1	Root Cause 3.2.1-Workers may be taking risks greater than what is expected.													
3.2.1.03	Perform a survey on the safety culture at Berkeley Lab and report results to Lab Management and employees.	Hatayama	03-Jul-06*	29-Jun-07										
3.2.1.04	Revise institutional ISM Plan and Division ISM Plans to define and discourage excessive risk taking. Define and compare types of risks (safety risks versus research program risks)	Hatayama	01-Jun-06*	01-Aug-06										
<b>Root Cause 3.2.2</b>			01-Jun-06	01-Mar-07										
3.2.2	Root Cause 3.2.2 - Risk taking is recognized, tolerated, and encouraged by workers, supervisors, coworkers, guests and students.													
3.2.2.02	Issue a memo from the Directorate that defines types of risks and discourages excessive risk taking in safety.	Chu	01-Jun-06*	01-Aug-06										
3.2.2.03	Add requirements for safety communications to Performance Review and Development forms.	Chu	01-Jun-06*	01-Mar-07										
3.2.2.04	Perform a survey on the safety culture at Berkeley Lab and report results to Lab Management and employees.	Hatayama	01-Jun-06*	29-Sep-06										
<b>Root Cause 3.3.1</b>			15-Mar-06 A	28-Sep-07										
3.3.1	Root Cause 3.3.1 - Root Cause analysis may be inadequate due to training inadequacies.													
3.3.1.01	Revise incident investigation procedures	Hatayama	01-Jun-06*	30-Jun-06										
3.3.1.02	Provide Tap Root and training to incident investigators	Hatayama	15-Mar-06 A	31-Aug-06										
3.3.1.03	Provide incident investigation training to Division Safety Coordinators and EH&S Liaisons.	Hatayama	01-Jun-06*	01-Sep-06										

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Activity ID	CAP Action Items	Responsible Person	Start	Finish	FY2006				FY2007				FY2008	
					Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1		
3.3.1.04	Revise investigator training to minimize stress to individuals under investigation.	Hatayama	01-Jun-06*	28-Sep-07										
<b>Root Cause 4.2.1</b>			01-Jun-06	01-Aug-06										
4.2.1	Root Cause 4.2.1 - Management safety communications are not consistently focused on lessons learned from accident/ incident investigations.													
4.2.1.02	Implement enhanced Lessons Learned program to accept near misses	Krupnick	01-Jun-06*	03-Jul-06										
4.2.1.03	Institute routine periodic memo from upper management to employees on EH&S issues	Chu	01-Jun-06*	01-Aug-06										
<b>CA Category #5 - Lab-Wide Work Control</b>			10-Jan-06 A	31-Oct-07										
<b>Root Cause 3.2.4</b>			01-Jun-06	31-Oct-07										
3.2.4	Root Cause 3.2.4 - Work control processes are less than adequate when scope, resources, personnel, schedule change.													
3.2.4.01	Develop a system to identify people who perform work under a formal authorization	McGraw	01-Jun-06*	31-Jan-07										
3.2.4.02	Develop procurement policies and procedures for tagging new acquisitions.	McGraw	01-Jun-06*	31-Jan-07										
3.2.4.03	Present proposed system to SRC	McGraw	01-Feb-07	15-Feb-07										
3.2.4.04	Use feedback from the SRC and other sources to guide the development of a system that manages changes in scope, resources, personnel and schedule that is graded to the level of authorization and can be effectively implemented	McGraw	16-Feb-07	28-Sep-07										
3.2.4.05	Publish new policies and procedures in PUB 3000	Hatayama	01-Oct-07	31-Oct-07										
<b>Root Cause 5.1.1</b>			01-Jun-06	31-Aug-07										
5.1.1	Root Cause 5.1.1 - The Laboratory does not have a policy in place requiring formal work planning and authorization for activities and work below LBNL regulatory threshold.	Chu												
5.1.1.01	Form a Team of Line Managers, Division Safety Coordinators and EH&S liasons to develop methods to formalize and document "line management authorization" of work.	Chu	01-Jun-06*	12-Jul-06										

<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: green; border: 1px solid black;"></span> Remaining Level of Effort</li> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: red; border: 1px solid black;"></span> Critical Remaining ...</li> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: black; border: 1px solid black;"></span> WBS Summary Bar</li> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: blue; border: 1px solid black;"></span> Actual Work</li> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: lightgreen; border: 1px solid black;"></span> Remaining Work</li> </ul>	<p><b>2006 ISMS ES &amp; H Peer Review Corrective Action Plan Schedule</b></p> <p><b>Lawrence Berkeley National Laboratory</b></p>	<p>CAP PM Schedule Layout - By Active Root Cause 31-May-06</p> <p>7 of 9</p> 
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Activity ID	CAP Action Items	Responsible Person	Start	Finish	Schedule													
					FY2006			FY2007				FY2008						
					Q2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1						
5.1.1.02	Develop a proposal for presentation to the SRC.	Chu	01-Jun-06*	13-Sep-06														
5.1.1.03	Incorporate feedback from the SRC, DSCs and Liaisons and develop a policy on review and documentation for line management authorization of work.	Chu	01-Jun-06*	10-Nov-06														
5.1.1.04	Integrate the approved methodology into PUB 3000	Hatayama	01-Jun-06*	12-Feb-07														
5.1.1.05	Develop appropriate training/ communication as needed.	Hatayama	01-Jun-06*	10-Nov-06														
5.1.1.06	Develop appropriate validation during the 2007 Self Assessment.	Krupnick	10-Jan-07*	31-Aug-07														
<b>Root Cause 5.1.2</b>			<b>22-May-06</b>	<b>29-May-07</b>														
5.1.2	<b>Root Cause 5.1.2 - The current policy and implementation guidance for AHDs lacks specificity.</b>																	
5.1.2.01	Transition all AHDs to the electronic AHD system	Hatayama	22-May-06*	22-Nov-06														
5.1.2.02	Evaluate the need to include SME review for non-laser AHDs and incorporate results in the Pub 3000.	Hatayama	01-Jun-06*	31-Jul-06														
5.1.2.03	Evaluate and develop the on-line technical support and/or training for AHD-preparers and adjust or enhance the training as necessary.	Hatayama	01-Jun-06*	31-Aug-06														
5.1.2.04	Complete a review of all policies relating to AHD.	Hatayama	01-Sep-06*	01-Nov-06														
5.1.2.05	Collect and review feedback from the 2006 IFA pertaining to the formal authorization program.	Hatayama	01-Jun-06*	31-Oct-06														
5.1.2.06	Propose new formal authorization policies and guidelines to the SRC. (If Needed)	Hatayama	01-Nov-06	31-Jan-07														
5.1.2.07	Publish the final policy revision in Pub3000.	Hatayama	01-Feb-07	30-Mar-07														
5.1.2.08	Evaluate implementation of policy revision. Publish final policy.	Krupnick	02-Apr-07	29-May-07														
<b>Root Cause 5.3.1</b>			<b>10-Jan-06 A</b>	<b>26-Oct-07</b>														
5.3.1	<b>Root Cause 5.3.1 - Work and hazard identification for projects/ maintenance-type work and activities is less than adequate.</b>																	

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					Q2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1
5.3.1.01	Evaluate existing policies governing hazard identification and oversight work performed by the Facilities Division.	McGraw	01-Jun-06*	31-Jul-06								
5.3.1.02	Evaluate existing policies governing hazard identification and review for work performed by construction sub-contractors.	McGraw	01-Jun-06*	31-Jul-06								
5.3.1.03	Evaluate existing policies governing hazard identification and oversight for work performed by equipment vendors.	Hatayama	01-Jun-06*	31-Aug-06								
5.3.1.04	Develop a proposal for hazard assessment and planning for these work classes and present this to the SRC.	Hatayama	01-Sep-06	31-Oct-06								
5.3.1.05	Incorporate feedback from Line Managers/ SRC, DSCs and Liaisons and develop a policy on review and documentation for these categories of work.	McGraw	01-Nov-06	31-Jan-07								
5.3.1.06	Integrate the approved methodology into PUB3000	Hatayama	01-Feb-07	28-Feb-07								
5.3.1.07	Develop additional training/communication	Hatayama	01-Mar-07	30-Apr-07								
5.3.1.08	Review and evaluate effectiveness during the 2007 Self Assessment	Krupnick	01-May-07	31-Jul-07								
5.3.1.09	Revise Division Self-Assessment to validate effectiveness.	Krupnick	10-Jan-06 A	31-Aug-07								
5.3.1.10	Implement review process (External to Subject Division) for this element.	Krupnick	03-Sep-07	26-Oct-07								

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