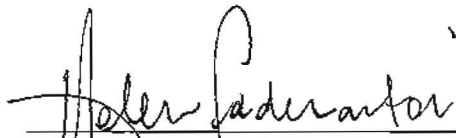


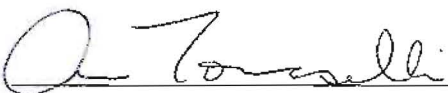
Integrated Safety Management Plan

Information Technology Division

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Date: 10/27/10


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Date: 10/27/10

Document Control: The Information Technology ISM Plan will be reviewed annually. Specific Section changes are shown in Appendix B.

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Division ISM	Helen Cademartori	10/10	9/11
Division ISM	Director R. Alvarez	9/30/09	9/10
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1.0 Purpose

The Integrated Safety Management (ISM) Plan is the document used to guide the implementation of integrated safety activities in all Information Technology Division efforts. The Laboratory's Environment Safety and Health (ES&H) policies and requirements are contained in the:

- Lawrence Berkeley National Lab Institutional Integrated Safety Management Plan PUB 3140
- Regulations and Procedures Manual (RPM) <http://www.lbl.gov/Workplace/RPM>
- Health and Safety Manual (PUB-3000) <http://www.lbl.gov/ehs/pub3000/>

This Integrated Safety Management Plan describes the mechanisms that are applied in the IT Division to ensure that safety policies are properly implemented. IT Division will conduct all of its operations in a manner that protects the health and safety of its personnel/staff (including employees, participating guests, contractors, vendors, students and visitors), does not endanger the environment, and is consistent with all applicable LBNL, university, and government agency policies and regulations.

2.0 Description of IT Division

The Information Technology (IT) Division supports DOE's research mission by providing strategic IT support services to the Lab. These services include:

- Server and Cluster Support
- Computer Infrastructure
- Networking
- Telephones
- Email
- Collaboration Tools
- Cybersecurity
- Identity Management
- Workstation Support
- Printing and Storage
- Business Support Applications
- Application Development
- Library Services
- Archives and Records
- Reports Coordination

3.0 ES&H Roles and Responsibilities

The Division Director is responsible for ensuring that the Division complies with all Laboratory policies and procedures. In order to accomplish this, the Division Director relies on line management and Division personnel to perform outlined tasks below.

3.1 Line Management

Department Heads, Group Leaders and Work Leads (if designated by Group Leaders):

- a. Are accountable to the IT Division Director for assuring that all activities of Division personnel are carried out in a safe manner and in accordance with all Laboratory ES&H requirements.
- b. Must consult with qualified specialists, including IT's Safety Coordinator, the Environmental Health & Safety (EHS) Division Liaison from, and Subject Matter Expert (SME) staff, to resolve any questions about Environment, Safety & Health (ES&H) activities.
- c. Ensure that Job Hazard Analysis (JHA) work groups accurately describe work done by each working group and that staff are assigned to the appropriate work groups.
- d. Must work closely with their staff to ensure that required training is taken
- e. Proactively promote and encourage safety awareness in the workplace.
- f. Are responsible for conducting quarterly walk arounds to discuss and address safety concerns with direct reports, and to inspect workspaces and address deficiencies, with the expectation that every employee and IT Division workspace will be reviewed at least once every year.
- g. For employees who are matrixed to other organizations, line management retains all ES&H responsibilities except where some of the responsibilities have been transferred to the host division or department through a formal Memorandum of Understanding (MOU). There are no MOU's in place for IT employees, but consideration is being given to setting some up for support staff matrixed to Life Sciences, Physical Biosciences, the Advanced Light Source, and the Molecular Foundry.

3.2 Division Personnel

Employees, Matrixed Staff, Participating Guests, Contractors, Vendors, Students and Visitors:

- a. Know and follow the ES&H requirements that apply to their work and contribute to the IT Division's ES&H activities as appropriate. This includes updating their individual JHAs annually, or when responsibilities change, and keeping current with required training.
- b. Know the Berkeley Lab's "[Stopping Unsafe Work Policy](#)". All Berkeley Lab employees, contractors, and participating guests are responsible for stopping work activities considered to be an imminent danger.
- c. Contact their supervisor and/or Division Safety Coordinator to report any musculoskeletal discomfort.
- d. Are familiar with ES&H Guiding Principles and Core Functions found in Appendix A.

3.3 Division Safety Manager

The IT Division Safety Manager is currently the IT Business Manager, reporting to the Division Director. The IT Division Safety Manager:

- a. Has overall responsibility for safety in IT
- b. Ensures that IT meets all LBNL ES&H requirements
- c. Serves as a member of the LBNL Safety Advisory Committee
- d. Chairs the IT Safety Committee
- e. Promotes a safety culture where everyone takes responsibility for their own safety and looks out for the safety of others.
- f. Coordinates with Supervisors, Managers, Work Leads and Area Safety Leaders to assure that Technical Area hazards are identified and reflected in the entrance

placards, and that IT personnel working in Technical Areas comply with the controls listed on the entrance placards.

3.4 Division Safety Coordinator

The Division Safety Coordinator is an IT employee and reports directly to the Division Director or designee. Currently the IT Division Safety Coordinator reports to the IT Division Safety Manager:

- a. Serves as a point of contact for all Division staff regarding the implementation and interpretation of ES&H policies, procedures and programs.
- b. Helps develop and implement Division-specific safety training, if needed.
- c. Promotes a safety culture where everyone takes responsibility for their own safety and looks out for the safety of others.
- d. Serves as a member of the Safety Coordinators' Committee, and represents the Division at Safety Coordinators' meetings.
- e. Coordinates and manages required Divisional safety documentation.

3.5 Area Safety Leaders

Area Safety Leaders are coordinators assigned by the Division controlling a technical area. IT has Area Safety Leaders for the 50A 1156 ICS Switching/Computer Room and the 50B 1275 and 50A 2109 computer rooms.

3.6 EH&S Division Liaison

The EH&S Division Liaison is an EH&S employee who serves as the designated point of contact for IT on all ES&H issues. Responsibilities include:

- a. Requests that the appropriate technical support be provided to implement and interpret Lab ES&H policies.
- b. Assists in hazard identification and the development of controls appropriate to the hazard and work being performed.
- c. Provides consultation on EH&S issues, requests the appropriate support, and assists with coordinating EH&S subject matter experts when needed
- d. Participates in incident reviews of illnesses, injuries, accidents, and other safety and environmental incidents, and assists with coordinating EH&S subject matter experts when needed
- e. Participates in the IT safety self-assessments as requested
- f. Supports, as requested, the elements of the ES&H program. Examples include:
 - i. The IT ISM Plan
 - ii. Training and JHA records
 - iii. Walk around inspection reports
 - iv. Hazard Management System (HMS)
 - v. The IT safety self-assessment

4.0 IT Division Safety Committee

The IT Division maintains a Safety Committee that meets as needed, but at least quarterly. It is chaired by the IT Safety Manager, representing the Division Director, and comprises one representative from each department, the Division Safety Coordinator, the Division Safety Advisory Committee Representative, and the EH&S Division Liaison.

The committee's activities include:

- Review, maintenance, and implementation of the Division's ISM plan
- Working with IT Division Management to participate in the preparation of an annual self-assessment report
- Receiving updates of recent division accidents and discussing trends that might be occurring
- Disseminating lessons learned
- Promoting ES&H awareness and training
- Reviewing any needs for specialized training
- Providing for and/or conducting routine inspections and self-assessments
- Participating in planning for the Management of Environment, Safety and Health (MESH) review
- Developing metrics and analyzing pertinent safety performance data
- Advising division management on ES&H issues

5.0 Work Authorizations and Training

Employees, sub-contractors, vendors and guests cannot work on site without proper authorization and training. This is accomplished through the following:

5.1 Work Groups

A work group is a set of workers who have exposure to a similar set of hazards. Everyone in a work group is initially given the same Work Group Hazard Profile. Work groups can cross organizational boundaries and an individual may also belong to several work groups.

Since most of the IT Division personnel work in an office environment, heavy computer use has been identified as the primary hazard. The IT employee work group addresses this hazard. In addition, work groups have been defined for the following areas:

- IT Employee
- IT Communications
- IT Archives and Records
- IT Data Center
- IT Computer Field Support
- IT Network Support
- IT Library and Report Coordination

Work group owners will review work groups annually to ensure hazards and controls are still appropriate.

5.2 Job Hazard Analysis (JHA)

The JHA is the tool used to identify work hazards and controls to address those hazards including the training requirements for each individual. A work group owner or a supervisor can add an employee to a work group or an employee can add themselves during the JHA process. When a supervisor discusses the JHA with an employee, they can tailor the JHA to that particular employee by removing or adding individual hazards as appropriate. The supervisor and the employee record their completion of the JHA process in the JHA database.

In cases where an individual does not have online access, training and requirements may be documented in any manner chosen by the supervisor, provided a copy is made available for the staff member's personnel file. Contract labor employees, guests and students are subject to the same ES&H requirements as career personnel for the purposes of training and qualification.

In addition to requirements delineated by the JHA, ergonomic evaluations of each computer workstation are required at the time of employment and when discomfort is noted. In the case of discomfort, a trained ergonomist will review the work area to provide guidance to mitigate any further discomfort.

5.3 Subcontractor Job Hazard Analysis and Work Authorization (SJHAWA)

IT Division Subcontractors, Vendors and Guests, not covered by individual JHAs, who perform non-construction, hands-on work must be covered by an SJHAWA. Activities such as computer programming, and office and administrative duties do not qualify as hands-on.

5.4 Hazard Management System (HMS)

The HMS is an online database that keeps an inventory of hazardous areas throughout the LBNL site. The Area Safety Lead responsible for each listed hazard reviews and updates information about each listed space in the HMS database annually. Current hazard listings for IT are the 50A 1156 ICS Switching/Computer Room and the 50B 1275C secure server room which have halon fire suppression systems controlled by IT. The main data center (50B1275) is also in the HMS database, but is owned by Computing Sciences and managed by IT.

5.5 Specific Authorizations/Permits

Certain IT activities in the IT Computer Facilities Group sometimes require specific authorizations/permits for:

5.5.1 Confined Space

Employees must be trained to enter communication manholes and must follow the process for entry into confined space. The [Confined Space Program](#) describes requirements and includes the required permit application form.

5.5.2 Lockout/Tagout (LOTO) and Energized Electrical Work Permit

If an IT contractor or subcontractor that will be performing electrical work on site, either a LOTO Permit or an Energized Electrical Work Permit (depending on the scope of their work) is required. [The Electrical Safety web site](#) includes the required permit application form.

5.5.3 Activity Hazard Document (AHD)

Currently IT has no work that involves hazards that would require an AHD. However, if in future anyone would be exposed to more significant electrical hazards, an AHD might be required. The electrical safety engineer in EH&S (x4694) must be contacted to determine whether an AHD is required and, if so, to approve it. The AHD defines the training required before the task can be started.

5.6 Training

When a JHA is completed for an employee, the training database accessed at the [Job Hazards Analysis Web Site](#) is updated accordingly. The database lists all training required for that

employee together with dates taken and expiration dates. Training must be completed before an employee is authorized to perform activities covered by the training. An employee can check the status of their training in the database, and a supervisor can access the status of training for all people reporting to them.

6.0 Offsite Work

6.1 Working at UC Berkeley Campus

If IT employees conduct Lab-sponsored work on the UCB campus (exclusive of Donner and Calvin Laboratories) they must follow the ES&H policies and procedures within the partnership [Agreement Between UCB and LBNL Concerning Environment, Health and Safety Policy and Procedures](#)

6.2 Telecommuting

Telecommuting is an option under certain conditions. An [Agreement & Authorization for Telecommuting](#) must be established between an employee and his/her supervisor every 12 months and filed in the department office. Once a telecommuting agreement is officially approved, the employee's offsite work space must be maintained by the employee. An employee using a computer either at a remote location or telecommuting can send a message to ergo@lbl.gov to request an evaluation over the phone. In addition, pictures of the employee sitting at the remote workstation can be sent to the same e-mail and feedback will be given by an ergonomist.

7.0 Performance Monitoring and Feedback

7.1 Self-Assessment Process

The Division will annually review what it deems the critical safety processes and procedures in need of review for that performance year, submitting the required annual report to Lab Management.

7.2 Division Walk Around Inspection Process & Schedule

Line management is responsible for conducting quarterly walk arounds to discuss and address safety concerns with direct reports, and to inspect workspaces and address deficiencies, with the expectation that every employee and IT Division workspace will be reviewed at least once every year. Walk around forms will be tracked by the Division Safety Coordinator to ensure all staff are reviewed at least once a year. The Division Safety Coordinator, along with line management and administrative support, will update any actionable items found during the walk arounds by logging work orders, ergo evaluations or corrective actions entered in the Corrective Action Tracking System (CATS) database, see 7.4 below, as deemed necessary.

7.3 Injury, Illness & Mishap Investigation & Reporting

The IT Division will conduct accident reviews, with participation of the Division Safety Coordinator, the ES&H Liaison, line management and the staff member involved in the accident, for OSHA recordable injuries and other significant accidents. Lessons learned and other information are communicated to the Safety Committee, line management, and Division personnel as appropriate. Injury and illness statistics and related information are accessible through the access-controlled Supervisor's Accident Analysis Report (SAAR) database maintained by EH&S.

7.4 CATS Tracking of Deficiencies

Items rising to the level of needing further review beyond a simple work request will be tracked either in the ergonomic database, when relating to ergonomic issues to specific employees, or in CATS for longer term or institutional type projects.

7.5 Near Hits (Precursors) Discussion and Lessons Learned

The IT Safety Manager and/or the Safety Coordinator will share with IT employees information about accidents and near hits and the lessons learned from to increase awareness of potential hazards and ways to avoid them. For issues that might apply to other organizations, descriptions will also be entered into the [LBNL Lessons Learned and Best Practices Database](#).

8.0 Emergency Preparedness

IT staff will actively participate in annual drills conducted at the Laboratory to be prepared in case of building evacuation. Employees can volunteer to participate in building emergency teams for their location.

Each IT employee will be supplied with an emergency/earthquake preparedness backpack. Individual IT employees will need to review contents annually for expired items.

9.0 Reporting Employee Concerns

A variety of communication methods exist at Berkeley which enable division employees to report environmental health and safety concerns or safety suggestions. Employees may discuss a concern directly with their division director, department head, immediate supervisor, principal investigator or division safety coordinator, as well as seek assistance from, EH&S Liaison, ES&H Suggestion Box, ES&H Division, the Laboratory Ombudsman, or the Department of Energy. Persons reporting hazards or improper activities are fully protected by the law and Lab policy against retaliation.

The available reporting mechanisms include:

IT Safety Manager	Helen Cademartori; HCademartori@lbl.gov x6468
IT Safety Coordinator	Ann Tomaselli; AMTomaselli@lbl.gov x2364
IT EH&S Liaison	Mike White; MJWhite2@lbl.gov x5818
LBNL Safety Concerns Web Page	http://www.lbl.gov/ehs/refs/safety_concern.shtml
LBNL Internal Whistleblower Hotline (24-hr. answering service)	1-800-403-4744
U.S. DOE Employee Concerns Program Hotline (24-hr)	1-800-701-9966
University-wide Hotline	1-800-403-4744
California Bureau of State Audits	1-800-952-5665
EH&S Suggestion Box	http://ehswprod.lbl.gov/mis/suggestions/suggestionsForm.asp

Appendix - A

Seven Guiding ES&H Principles:

1. Line Management Responsibility for ES&H
2. Clear Roles and Responsibilities
3. Competence Commensurate with Responsibilities
4. Balanced Priorities
5. Identification of ES&H Standards and Requirements
6. Controls Tailored to Work Being Performed
7. Operations Authorization

Five Core ES&H Functions:

1. Work Planning
2. Hazard and Impact Analysis
3. Establishment of Controls
4. Work Performance
5. Feedback and Improvement

Appendix - B

IT ISM Change Log

This list shows changes in the IT Integrated Safety Management Document. Our first ISM was posted in June of 2007. The following changes have occurred since its first posting in 2007:

2010 Changes:

Appendix B	Removed “ <i>IT Division ES&H Self-Assessment Measures</i> ” and renamed.
Appendix C	Now Appendix B
Section 3.3	Noted change of “Safety Manager”
Section 7.1	Modified Self-Assessment process to reflect changes to reporting.
Section 9.0	Updated contacts

2009 Changes:

Item changed	Changes made
Several sections from the last version were relocated within the current document	<i>Document control moved from Section 2 and Appendix-B to the Title Page and Appendix C</i> <i>Description of IT Division moved from Section 3 to Section 2</i> <i>Responsibility and Accountability moved from Section 4 to Section 3</i> <i>IT Division Safety Committee moved from Section 5 to Section 4</i> <i>Work Group Descriptions moved from Section 7 to 5.1</i> <i>Qualification and Training from Section 8 to 5</i>
Title Page	<i>Deputy Division Director and Safety Committee Chair changed to Rosemary Lowden and title changed to “Safety Manager”.</i>
Table of Cont.	<i>Added</i>
Section 2	<i>Description of IT Division services was expanded.</i>
Section 3	<i>Expanded descriptions of ES&H Roles, Responsibilities and Accountabilities within the Division. Added descriptions for Division Safety Manager, Area Safety Leader, Division Safety Coordinator and EH&S Division Liaison.</i>
Section 4	<i>IT Division Safety Committee: Added a description of committee activities.</i>
Section 5	<i>Added “Work Authorization and Training” section.</i>
Section 5.1	<i>Modified Work Group Descriptions (previously listed in Section 7).</i>
Section 5.2	<i>Expanded information on “Job Hazard Analysis (JHA)” (info was previously in Section 8).</i>
Section 5.3	<i>Added “Subcontractor Job Hazard Analysis and Work Authorization</i>

	<i>(SJHAWA)” section.</i>
Section 5.4	<i>Added “Hazard Management System (HMS)” section.</i>
Section 5.5	<i>Added “Specific Authorization/Permits” section. New information below this section includes “Confined Space”, “LockOut/TagOut (LOTO) and Energized Electrical Work Permit” and “Activity Hazard Document (AHD)”</i>
Section 5.6	<i>Added “Training” section.</i>
Section 6	<i>Added “Offsite Work” section.</i>
Section 6.1	<i>Added “Working at UC Berkeley Campus” section.</i>
Section 6.2	<i>Added “Telecommuting” section.</i>
Section 7.0	<i>Added “Performance Monitoring and Feedback” section.</i>
Section 7.1	<i>Self-assessment process: Added in the requirement to review all division safety process and procedures annually.</i>
Section 7.2	<i>Added “Division Walk Around Inspection Process & Schedule” section.</i>
Section 7.3	<i>Added “Injury, Illness and Mishap Investigation and Reporting” section.</i>
Section 7.4	<i>Added “CATS Tracking of Deficiencies” section.</i>
Section 7.5	<i>Added “Near Hits and Lessons Learned” sections.</i>
Section 8	<i>Added “Emergency Preparedness” section.</i>
Section 9	<i>Added “Reporting Employee Concerns” section.</i>
	<i>Removed “Balanced Resources” Section to match Division ISM Implement Plan Review Checklist.</i>
Appendix-B	<i>Added “IT Division ES&H Self-Assessment Measures”.</i>
Appendix-C	<i>Added IT ES&H Self-Assessment Measures to ISM Plan.</i>

2008 Changes:

Item changed	Changes made	Date of change
Section 2	<i>Added Document Control Section</i>	9/17/08
Section 4	<i>Redefined line management to include Work Leads in addition to Department Heads, Group Leaders and other supervisors.</i>	9/9/08
Section 4.1	<i>Added line management are responsible for quarterly walk arounds</i>	9/9/08
Section 4.2	<i>Updating of division personnel responsibilities</i>	9/9/08
Section 5	<i>Modified Division Safety Committee meeting frequency and added responsibility to review work and list of JHA work groups</i>	9/9/08

Section 7	<i>Modified Scope of work authorized to include the 6 IT workgroups and review responsibilities and schedule for work and JHA work groups</i>	9/9/08
Section 8	<i>Modified Qualifications and Training to address Lab ergonomics program changes</i>	9/9/08
Section 9	<i>Updated DSC resource allocation</i>	9/9/08