

University of California, Berkeley Injury and Illness Prevention Program

Effective Date: May 3, 2016

Department Name: Civil and Environmental Engineering

Department Head: Prof. Rob Harley
Name
Chairman
Title

Department Safety Coordinator: Negassi Hadgu
Name
643-5401
Phone Number

Computer Workstation Evaluator: Noah Beil
Name
642-2023
Phone Number

Safety Related Items:

Available for review in Room 335 Davis Hall
Location of minutes from Safety Committee Meeting (see Section II)

Available online at: www.ce.berkeley.edu/resources/safety Turn in to 760 Davis
Blank 'Report of Unsafe Condition' – Pickup and Turn-in locations (see Section III)

General material, 335 Davis; Specific procedures in individual labs & from managers
Location of other safety-related items (see Section IV)

Lyniel Takahashi (767 Davis Hall, 643-8738)
Person who assists injured employees with appropriate paperwork (see Section VI)

335 Davis Hall (Office of Negassi Hadgu, DSC)
IIPP Documents and blank forms – safe, convenient record keeping location (see Section IX)

335 Davis Hall (Office of Negassi Hadgu, DSC)
Location of Training Records for IIPP (see Section IX)

(Training Documentation Form can be found in Appendix A of this document.)

The Safety Committee meets: Quarterly, Thursdays in Carlson Room, 7th floor Davis
(at least quarterly; see Section II)

The Safety Committee members are:

Chair's Name: Negassi Hadgu, Department Safety Coordinator
Section/Sub-unit: Instructional Staff

Member Name: Shakhzod Takhirov
Section/Sub-unit: Instructional Staff

Member Name: Sharon Lilly
Section/Sub-unit: Manager of Civil and Environmental Engineering

Member Name: Alex Lin
Section/Sub-unit: Research Student

Member Name: Shelley Okimoto
Section/Sub-unit: Academic Affairs Office

Member Name: Cruz Carlos
Section/Sub-unit: Instructional Staff

Member Name: Michael Riemer
Section/Sub-unit: Instructional Staff

Member Name: Jeff Higginbotham
Section/Sub-unit: Machine Shop

Member Name: Claudia P. Ostertag
Section/Sub-unit: CEE Vice-chair, Technical Services

Member Name: Jacquelyn Garcia, Building Coordinator
Section/Sub-unit: Storeroom

Member Name: Anne Marie Anderssen
Section/Sub-unit: Engineering Research Support Organization (ERSO)

Buildings occupied by this department: (For off campus buildings, write the physical address of the building. Also, do not include buildings used only for storage.) Please note, this section will assist you in ensuring that all your staff are trained on the appropriate Building Emergency Plan(s) (BEP). While the Building Coordinator is required to create the BEP, you are responsible for ensuring your department's personnel receive training on the applicable BEP.

1. Building name or address: Davis Hall
Unit within your department (if applicable): CEE
Building Coordinator & phone at this location: Jacquelyn Garcia, 642-1276
2. Building name or address: McLaughlin Hall
Unit within your department (if applicable): Transportation and EPM
Building Coordinator & phone at this location: Susan Madison, 643-2055
3. Building name or address: O'Brien Hall
Unit within your department (if applicable): Environmental Eng.
Building Coordinator & phone at this location: Jacquelyn Garcia, 642-1276
4. Building name or address: Hearst Mining Building
Unit within your department (if applicable): Rock Mechanics Lab
Building Coordinator & phone at this location: Jennifer Teverbaugh 643-1582

**University of California, Berkeley
Injury and Illness Prevention Program**

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University of California, Berkeley Injury and Illness Prevention Program

I. INTRODUCTION AND PURPOSE

It is the policy of the University of California, Berkeley to maintain a safe and healthy work environment for each employee (including student and contract employees), and to comply with all applicable occupational health and safety regulations. This Injury and Illness Prevention Program (IIPP) is intended to establish a framework for identifying and correcting workplace hazards within the department, while addressing legal requirements for a formal, written IIPP.

II. RESPONSIBILITIES

Department Head

The Department Head has primary authority and responsibility to ensure departmental implementation of the IIPP and to ensure the health and safety of the department's faculty, staff and students. This is accomplished by communicating the Berkeley campus's emphasis on health and safety, analyzing work procedures for hazard identification and correction, ensuring regular workplace inspections, providing health and safety training, and encouraging prompt employee reporting of health and safety concerns without fear of reprisal.

Department Safety Committee

The Safety Committee has the ongoing responsibility to maintain and update this IIPP, to assess departmental compliance with applicable regulations and campus policies, to evaluate reports of unsafe conditions, and to coordinate any necessary corrective actions. The Safety Committee meets quarterly and includes representatives from various sections or subunits of the department. Each employee has a designated representative on the committee. The Safety Committee membership may rotate periodically.

Unsafe conditions that cannot be immediately corrected by an employee or his/her supervisor should be reported to the Department Safety Coordinator or any Safety Committee member by filling out a "Report of Unsafe Condition or Hazard" form (IIPP Form 1).

Timely correction of workplace hazards are tracked by the Safety Committee which receives and reviews reports of unsafe conditions, workplace inspection reports, and injury reports. Specifically, the Safety Committee:

- Reviews the results of periodic, scheduled workplace inspections to identify any needed safety procedures or programs and to track specific corrective actions.

- Reviews supervisors' investigations of accidents and injuries to ensure that all causes have been identified and corrected.
- Where appropriate, submits suggestions to department management for the prevention of future incidents.
- Reviews alleged hazardous conditions brought to the attention of any committee member, determine necessary corrective actions, and assign responsible parties and correction deadlines.
- When determined necessary by the Committee, the Committee may conduct its own investigation of accidents and/or alleged hazards to assist in establishing corrective actions.
- Submits recommendations to assist department management in the evaluation of employee safety suggestions.

The Safety Committee prepares and makes available to all department personnel written minutes of issues discussed at the meetings. The Committee meeting minutes are documented on IIPP Form 2, "Safety Committee Meeting Documentation," or a similar form. These minutes are made available in a convenient location and are maintained on file for at least one year.

The Safety Committee can seek assistance in the remediation of a hazard from other departments, including the Office of Environment, Health & Safety (EH&S) for campus health, safety, radiation, and laser issues, University Health Services (UHS) for ergonomic and workers' compensation issues, or the University of California Police Department (UCPD) for personal security concerns.(see Section X).

Department Safety Coordinator

The Safety Coordinator is responsible for:

- Ensuring that the Safety Committee is aware of all accidents which have occurred, and all hazards which have been observed and reported since the last meeting.
- Working with the Building Coordinator to address facility-related safety concerns.
- Assisting in the coordination of required health and safety training.
- Serving as liaison with EH&S and other campus safety resources on issues the department cannot resolve.
- Maintaining copies of Safety Committee minutes and other safety-related records.

The Safety Coordinator may seek assistance from other members of the department as necessary to meet these responsibilities.

Supervisors

Supervisors play a key role in the implementation of the department's IIPP. Supervisors may be Management Services Officers, Senior Research Associates, Department Chairs, Principal Investigators, or others. They are responsible for:

- Communicating to their staff and students the Berkeley campus's and Civil Engineering's emphasis on health and safety.
- Ensuring periodic, documented inspection of workspaces under their authority.
- Promptly correcting identified hazards.
- Modeling and enforcing safe and healthful work practices.
- Providing appropriate safety training and personal protective equipment.
- Implementing measures to eliminate or control workplace hazards.
- Stopping any employee, student or visitor's work that poses an imminent hazard to either that person or any other individual.
- Encouraging personnel to report health and safety issues to the Safety Committee without fear of reprisal.

All Employees

It is the responsibility of all faculty and staff to comply with all applicable health and safety regulations, UC policies, and established work practices. This includes, but is not limited to:

- Observing health and safety-related signs, posters, warning signals and directions.
- Reviewing the building emergency plan (BEP) available on the EH&S website and knowing where their emergency assembly area is located.
- Learning about the potential hazards of assigned tasks and work areas.
- Taking part in appropriate health and safety training.
- Following all safe operating procedures and precautions.
- Using proper personal protective equipment.

- Warning coworkers about defective equipment and other hazards.
- Reporting unsafe conditions immediately to a supervisor, and stopping work if an imminent hazard is presented.
- Staying at home to recover from communicable illnesses
- Participating in workplace safety inspections.

III. IDENTIFYING WORKPLACE HAZARDS

Regular, annual workplace safety inspections of all departmental administrative, shop and laboratories must be conducted. By law, the first of these inspections must take place when the department first adopts the IIPP. The inspections should be noted on IIPP Form 3 or other similar documentation, and the department should maintain copies of this documentation. These regular inspections will be supplemented with additional inspections whenever new substances, processes, procedures, or equipment introduced into the workplace represent a new occupational safety and health hazard or whenever supervisors are made aware of a new or previously unrecognized hazard.

Generally, supervisors are responsible for identification and correction of hazards that their staff and/or students face and should ensure that work areas they exercise control over are inspected at least annually. Supervisors check for safe work practices with each visit to the workplace and should provide immediate verbal warning when hazards are observed, or feedback and corrective measures when hazardous work processes are witnessed or discovered.

The "Report of Unsafe Condition" (www.ce.berkeley.edu/resources/safety) is to be filled out when a referral is made to the Safety Committee as a result of a condition discovered during an inspection for which the responsible supervisor could not determine an immediate remedy. The "Report of Unsafe Condition" form can also be obtained by any employee or other personnel and filled out and turned in anonymously. Forms are available in the DSC Office, 335 Davis Hall, or online via the Civil Engineering website.

IV. COMMUNICATING WORKPLACE HAZARDS

Supervisors are responsible for communicating with all workers about safety and health issues by a method readily understandable by all workers. All department personnel are encouraged to communicate safety concerns to their supervisor without fear of reprisal. The Safety Committee is another resource for communication regarding health and safety issues for department employees. Each employee has a representative on the committee

that will inform him or her of hazard corrections and committee activities. Additionally, Safety Committee minutes and other safety-related items are posted or made available at a convenient location. Employees will also be informed about safety matters by e-mail, voice mail, or distribution of written memoranda. Occasionally, the Safety Committee may also sponsor seminars or speakers or coordinate other means to communicate with employees regarding health and safety matters.

Supervisors are responsible for ensuring that employees are supplied access to hazard information pertinent to their work assignments. Information concerning the health and safety hazards of tasks performed by department staff is available from a number of sources. These sources include, but are not limited to, Safety Data Sheets (SDSs, see below), equipment operating manuals, the Department Safety Coordinator, EH&S, campus libraries, container labels, work area postings, etc.

Material Safety Data Sheets

Safety Data Sheets (SDSs) [formerly known as Material Safety Data Sheets (MSDS)] provide information on the potential hazards of products or chemicals. Hard copies of SDSs for the chemicals used in the department are available to all employees in a convenient location. If an SDS is found to be missing, a new one can be obtained by faxing a written request to the manufacturer. A copy of this request should be kept until the SDS arrives.

SDSs are also available over the Internet from a variety of sources. They can be obtained by accessing the EH&S web page (<http://www.ehs.berkeley.edu>) and clicking on “Working in Labs” and then “SDS.” For further information, contact EH&S for a fact sheet explaining how to use SDSs. Videos and training on how to read and understand the information presented on an SDS are also available from EH&S.

Equipment Operating Manuals

All equipment is to be operated in accordance with the manufacturer’s instructions, as specified in the equipment’s operating manual. Copies of operating manuals when available are kept with each piece of equipment in the department. Persons who are unfamiliar with the operation of a piece of equipment and its potential hazards must at least read the operating manual before using the equipment. Training should also be sought from an experienced operator or supervisor.

V. CORRECTING WORKPLACE HAZARDS

Hazards discovered either as a result of a scheduled periodic inspection or during normal operations must be corrected by the supervisor in control of the work area, or by cooperation between the department in control of the work area and the supervisor of the employees working in that area. Supervisors of affected employees are expected to

correct unsafe conditions as quickly as possible after discovery of a hazard, based on the severity of the hazard.

Specific procedures that can be used to correct hazards include, but are not limited to, the following:

- Tagging unsafe equipment “Do Not Use Until Repaired,” and providing a list of alternatives for employees to use until the item is repaired.
- Stopping unsafe work practices and providing retraining on proper procedures before work resumes.
- Reinforcing and explaining the need for proper personal protective equipment and ensuring its availability.
- Barricading areas that have chemical spills or other hazards and reporting the hazardous conditions to a supervisor or Building Coordinator.

Supervisors may use the "Hazard Correction Report" (IIPP Form 4) to document corrective actions, including projected and actual completion dates. If necessary, supervisors can seek assistance in developing appropriate corrective actions by submitting a "Report of Unsafe Condition" to the Safety Committee. If the Safety Committee requires assistance from other campus resources such as EH&S, Facility Services, or UCPD, these resources should be contacted immediately.

If an imminent hazard exists, work in the area should cease, and the appropriate supervisor must be contacted immediately. If the hazard cannot be immediately corrected without endangering employees, other personnel or property, all personnel need to be removed from the area except those qualified and necessary to correct the condition. These qualified individuals will be equipped with necessary safeguards before addressing the situation.

VI. INVESTIGATING INJURIES AND ILLNESSES

Injury Reporting

Employees who are injured at work must report the injury immediately to their supervisor. Students who are not employees who are injured or involved in an accident should report the incident to their instructor. In either case, if immediate medical treatment beyond first aid is needed, call 911. The injured party will be taken to the appropriate hospital or medical center. If non-emergency medical treatment for work-related injuries or illnesses is needed, call the Tang Center’s Occupational Health Clinic (2-6891) or Urgent Care Clinic (2-3188).

The supervisor of the injured employee must work with a designated department personnel to ensure that the "Employer's Report of Occupational Injury or Illness" and a "Workers' Compensation Claim Form" are completed properly and submitted to the Workers' Compensation Office (Tang Center, Suite 2100).

If the injured employee saw a physician, the supervisor obtains a medical release form before allowing the employee to return to work. The health care provider may stipulate work tasks that must be avoided or work conditions that must be altered before the employee resumes his or her full duties.

Incident Investigation

The employee's supervisor or student's instructor is responsible for performing an investigation to determine and correct the cause(s) of the incident. Specific procedures that can be used to investigate workplace accidents and hazardous substance exposures include:

- Interviewing injured personnel and witnesses.
- Examining the work area for causative factors.
- Reviewing established procedures to ensure they are adequate and were followed.
- Reviewing training records of affected personnel.
- Determining all contributing causes to the incident.
- Taking corrective actions to prevent the incident/exposure from reoccurring.
- Recording all findings and actions taken.

The supervisor's findings and corrective actions may be documented and presented to the Safety Committee using the "Occupational Accident, Injury or Illness Investigation Report" (IIPP Form 5) or on the fully-completed Employee Report of Injury form. If the supervisor is unable to determine the cause(s) and appropriate corrective actions, other resources may be sought, including the department's Safety Committee, EH&S, and other campus safety organizations (see Section X).

The Safety Committee reviews each accident or injury report to ensure that the investigation was thorough and that all corrective actions are completed. Investigations and/or corrective actions that are found to be incomplete are routed back to the supervisor for further follow-up, with specific recommendations noted by the committee. The Department Safety Coordinator brings corrective actions that are not implemented in a reasonable period of time to the attention of the Department head.

VII. EMPLOYEE HEALTH AND SAFETY TRAINING

Employee safety training is provided at no cost to the employee and is conducted during the employee's normal working hours on University time. Safety training may be presented by a knowledgeable supervisor, other department personnel, or by representatives from other relevant campus departments. Regardless of the instructor, all safety training is documented using the "Safety Training Attendance Record" (IIPP Form 6) or an equivalent record that includes all the information required on IIPP Form 6. Copies of training rosters are sent to EH&S for inclusion in the campus' "Learning Management System (LMS)" for permanent record retention.

Initial IIPP Training

When the IIPP is first implemented, all department personnel are trained on the structure of the IIPP (Appendix A), including individual responsibilities under the program, and the availability of the written program. Training is also provided on how to report unsafe conditions, how to access the Safety Committee, and where to obtain information on workplace safety and health issues.

Personnel hired after the initial training session are oriented on this material as soon as possible by the Safety Coordinator or appropriate supervisor. These individual training sessions are documented using IIPP Form 7, "New Employee Safety Training Record," or the equivalent.

Training on Specific Hazards

Supervisors are required to be trained on the hazards to which the employees under their immediate control may be exposed. This training aids a supervisor in understanding and enforcing proper protective measures.

All supervisors must ensure that the personnel they supervise receive appropriate training on the specific hazards of work they perform, and the proper precautions for protection against those hazards. Training is particularly important for new employees or students and whenever a new hazard is introduced into the workplace or learning location. Such hazards may include new equipment, hazardous materials, or procedures. Health and Safety training is also required when employees are given new job assignments on which they have not previously been trained and whenever a supervisor is made aware of a new or previously unrecognized hazard.

Specific topics which may be appropriate to department personnel include, but are not limited to, the following:

- Fire prevention techniques and fire extinguisher use.
- Obtaining emergency medical assistance and first aid.

- Disaster preparedness and response, including building emergency plans (BEP) and evacuation procedures.
- Health and safety for computer users.
- Back care, body mechanics, and proper lifting techniques.
- Hazard communication, including training on MSDSs, chemical hazards and container labeling.
- Proper housekeeping.
- Chemical spill reporting procedures.

The facilities within the Department of Civil and Environmental Engineering include a broad variety of laboratory and shop settings, which consequently pose a range of safety hazards. To insure safety in these environments, all personnel must be trained specifically for the hazards presented by the activities they are performing in a given space, by laboratory or shop personnel familiar with the procedures and equipment pertinent to that activity. Descriptions of the various facilities, roles and responsibilities are delineated in the CEE department's Shop Safety Program.

Safety Training Resources

Available safety training resources include videos, online training, in-person training, written programs, fact sheets, equipment operation manuals, etc. Much of this training information is available through the EH&S web site at <http://ehs.berkeley.edu> In addition, the Civil and Environmental Engineering Department has its Shop Safety Program for Davis Hall, as well as Laboratory Standard Operating Procedures (SOPs) which outline safe work practices and procedures to be followed by affected personnel.

VIII. ENSURING COMPLIANCE

All department personnel have the responsibility for complying with safe and healthful work practices, including applicable regulations, campus policy, and departmental safety procedures. Overall performance in maintenance of a safe and healthy work environment should be recognized by the supervisor and noted in performance evaluations. Employees will not be discriminated against for work-related injuries, and injuries will not be included in performance evaluations, unless the injuries were a result of an unsafe act on the part of the employee.

Standard progressive disciplinary measures in accordance with the applicable personnel policy or labor contract will result when employees fail to comply with applicable regulations, campus policy, and/or departmental safety procedures. Faculty members will be disciplined for unsafe practices in accordance with the Faculty Code of Conduct.

Students not employed by the University will be disciplined for unsafe practices in accordance with the Student Code of Conduct. All personnel will be given instruction and an opportunity to correct unsafe behavior. Repeated failure to comply or willful and intentional noncompliance may result in disciplinary measures up to and including termination/expulsion.

IX. RECORD KEEPING

Documents related to the IIPP are maintained in a safe and convenient location for record keeping. Documents that are kept on file include:

- Records of scheduled and periodic workplace inspections, including the persons conducting the inspection, any identified unsafe conditions or work practices, and corrective actions (IIPP Form 3 or equivalent).
- Employee safety training records, including the names of all attendees and instructors, the training date, and material covered (IIPP Forms 6 and 7 or equivalent in the EH&S LMS).
- Reports of Unsafe Conditions or Hazards (IIPP Form 1).
- Safety Committee Meeting Documentation (IIPP Form 2).
- Hazard Correction Reports (IIPP Form 4).
- Incident Investigation Reports (IIPP Form 5).

X. CAMPUS SAFETY RESOURCES

A number of University programs and service organizations have been established to address injury and illness prevention and to maintain and promote a safe and healthful work environment for the campus community. A list is provided below, please use the Campus Telephone Directory for up-to-date telephone numbers.

Chancellor's Office - For information on campus policies.
642-2331

Office of Emergency Management - For information on disaster preparedness.
642-3073
<http://oem.berkeley.edu>

Office of Environment, Health & Safety - For information on various safety topics,
including hazard evaluations and employee training.
642-3073
<http://www.ehs.berkeley.edu>

Office of Risk Services - For safety issues that may generate lawsuits against the University.

642-5141

<http://riskservices.berkeley.edu>

Office of the Academic Ombudsperson - Assistance for academic appointees in dealing with supervisory issues.

642-4226

Office of the Ombudsperson for Staff - Assistance for staff employees in dealing with supervisory issues.

642-7823

<http://stfombuds.berkeley.edu/>

Office of Human Resources - For information on personnel policies and labor contracts.

642-9046

<http://hrweb.berkeley.edu/hrhome.htm>

Facility Services - For installation and repair of facility safety equipment.

642-1032

Police Department (UCPD) - For information on personal security at the workplace.

642-6760

<http://public-safety.berkeley.edu/police>

School of Optometry: Vision Care Services - For assistance with safety eyewear.

643-2020

Student Life Advising Services - Assistance for student employees.

642-7224

University Health Services - For assistance on various topics, including psychological counseling, medical evaluations and treatment, ergonomic issues, worksite wellness, and Workers' Compensation programs.

642-2000

<http://www.uhs.berkeley.edu>

Appendix A: Training Documentation

Law requires training on this Injury and Illness Prevention Program (IIPP) for all current and new employees, including faculty, staff and student employees. This training can be provided by allowing each employee to read the IIPP on their own, with the Department Safety Coordinator and EH&S available to answer any questions. **Completion of this training must be documented by having each employee sign the training record below.** This record must be maintained, along with the written IIPP in the department for a minimum of one year, and must be made available to Cal/OSHA inspectors.

I verify that I have read this Injury and Illness Prevention Program, that I understand its contents, and that I agree to comply with its requirements:

Name	Training Date(s)	Name	Training Date(s)
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