University of California, Berkeley Injury and Illness Prevention Program

Effective Date: November 7, 2005

Department Name: Materials Science and Engineering

Department Head: Robert Ritchie

Name

<u>Chairperson</u>

Title

Department Safety Coordinator: Chris Kumai

Name

642-3827 Phone Number

Computer Workstation Evaluator: Chris Kumai (to be trained)

Name

642-3827 Phone Number

Safety Related Items:

Safety Bulleting Board - central east-west corridor first floor

Location of minutes from Safety Committee Meeting (see Section II)

Safety Bulleting Board - central east-west corridor first floor

Alternatively, turn in completed reports to the Departmental Safety Coordinator Blank 'Report of Unsafe Condition' – Pickup and Turn-in locations (see Section III)

Safety Bulleting Board - central east-west corridor first floor

Location of other safety-related items (see Section IV)

Department Safety Coordinator

Person who assists injured employees with appropriate paperwork (see Section VI)

Department Safety Coordinator

Documents related to IIPP – safe, convenient record keeping location (see Section IX)

<u>Department Safety Coordinator</u> *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: At least quarterly.

(at least quarterly; see Section II)

The Safety Committee members are:

Chair's Name: <u>Prof. Fiona Doyle</u>

Section/Sub-unit: Department

Member Name: <u>Matt Sherburne</u> Section/Sub-unit: <u>Chrzan Group</u>

Member Name: Shawn Thorne Section/Sub-unit: Devine Group

Member Name: <u>Jeff Winterton</u> Section/Sub-unit: <u>Doyle Group</u>

Member Name: <u>Kirstin Alberi</u> Section/Sub-unit: <u>Dubon Group</u>

Member Name: <u>Dan Steingart</u> Section/Sub-unit: <u>Evans Group</u>

Member Name: Melissa Santala
Section/Sub-unit: Glaeser Group

Member Name: <u>Fatima Johnson</u> Section/Sub-unit: <u>Gronsky Group</u>

Member Name: <u>Becca Jones</u> Section/Sub-unit: <u>Haller Group</u>

Member Name: <u>Matt Harris</u> Section/Sub-unit: Healy Group

Member Name: <u>Poorya Sabounchi</u>

Section/Sub-unit: Lee Group

Member Name: <u>Kyuoh Lee</u> Section/Sub-unit: <u>Morris Group</u>

Member Name: <u>Steven Crane</u> Section/Sub-unit: <u>Ramesh Group</u>

Member Name: <u>Lisa Alldredge</u> Section/Sub-unit: <u>Suzuki Group</u> Member Name: Andrei Istratov
Section/Sub-unit: Weber Group

(If more space is needed to list Committee Members, please include a separate sheet.)

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. If you need assistance completing this section, please call EH&S at 642-3073.

 Building name or address: Hearst Memorial Mining Building Unit within your department (if applicable): Building Coordinator and phone no at this location: Chris Kumai x2-3827

University of California, Berkeley Injury and Illness Prevention Program

TABLE OF CONTENTS

- I. INTRODUCTION AND PURPOSE
- II. RESPONSIBILITIES
- III. IDENTIFYING WORKPLACE HAZARDS
- IV. COMMUNICATING WORKPLACE HAZARDS
- V. CORRECTING WORKPLACE HAZARDS
- VI. INVESTIGATING INJURIES AND ILLNESSES
- VII. EMPLOYEE HEALTH AND SAFETY TRAINING
- VIII. ENSURING COMPLIANCE
- IX. RECORD KEEPING
- X. CAMPUS SAFETY RESOURCES

APPENDICES

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 at least 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 will be tracked by the Safety Committee which will receive and review reports of unsafe conditions, workplace inspection reports, and injury reports. Specifically, the Safety Committee will:

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

- Review supervisors' investigations of accidents and injuries to ensure that all causes have been identified and corrected.
- Where appropriate, submit suggestions to department management for the prevention of future incidents.
- Review 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.
- Submit recommendations to assist department management in the evaluation of employee safety suggestions.

The Safety Committee must prepare and make available to all department personnel written minutes of issues discussed at the meetings. The Committee meeting minutes must be documented on IIPP Form 2, "Safety Committee Meeting Documentation," or a similar form. These minutes must be posted or made available in a convenient location and must be 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 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 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's work that poses an imminent hazard to either the employee or any other individual.
- Encouraging employees 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 and assembly area.
- 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.
- 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 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 should check for safe work practices with each visit to the workplace and should provide immediate verbal feedback where hazards are observed.

The "Report of Unsafe Condition" Form 1 should 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, filled out and turned in anonymously.

IV. COMMUNICATING WORKPLACE HAZARDS

Supervisors are responsible for communicating with all workers about safety and health issues in a form 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, distribution of written memoranda, or by articles in the internal Departmental newsletter (if applicable). 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, Material Safety Data Sheets (MSDSs, see below), equipment operating manuals, the Department Safety Coordinator, EH&S, campus libraries, container labels and work area postings.

Material Safety Data Sheets

Material Safety Data Sheets (MSDSs) provide information on the potential hazards of products or chemicals. Hard copies of MSDSs for the chemicals used in the department are available to all employees in a convenient location. If an MSDS 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 MSDS arrives.

MSDSs 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 "MSDS." For further information, contact EH&S for a fact sheet explaining how to use MSDSs. Videos and training on how to read and understand the information presented on an MSDS 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 should be 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 should 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, PP-CS, 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 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 should obtain 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.

Injury 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 injured employee's workstation for causative factors.
- Reviewing established procedures to ensure they are adequate and were followed.
- Reviewing training records of affected employees.
- Determining all contributing causes to the accident.
- Taking corrective actions to prevent the accident/exposure from reoccurring.
- Recording all findings and actions taken.

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

The Safety Committee will review 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 will be routed back to the supervisor for further follow-up, with specific recommendations noted by the committee. The Department Safety Coordinator will bring 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 should be documented using the "Safety Training Attendance Record" (IIPP Form 6) or an equivalent record that includes all the information required on IIPP Form 6.

Initial IIPP Training

When the IIPP is first implemented, all department personnel will be trained on the structure of the IIPP (Appendix A), including individual responsibilities under the program, and the availability of the written program. Training will also be 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 will be oriented on this material as soon as possible by the Safety Coordinator or appropriate supervisor. These individual training sessions should be 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 and whenever a new hazard is introduced into the workplace. 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 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.

Safety Videos

A list of workplace safety videos that are available for borrowing can be obtained by contacting EH&S. Videos are available on a wide range of topics, including hazard communication, chemical safety, and various physical hazards. You can read descriptions of the videos and order them on-line via the EH&S web site at http://ehs.berkeley.edu by clicking on "Videos" under the "Publications" heading. Videos should be used to supplement, not replace, face-to-face safety instruction, so that trainees have an opportunity to ask questions of a knowledgeable instructor.

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.

IX. RECORD KEEPING

Documents related to the IIPP are maintained in a safe and convenient location for record keeping. Documents that should be 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).

- Reports of Unsafe Conditions or Hazards (IIPP Form 1).
- Safety Committee Meeting Documentation (IIPP Form 2).
- Hazard Correction Reports (IIPP Form 4).
- Accident, Injury or Illness 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 Preparedness - For information on disaster preparedness.

642-9036

http://public-safety.berkeley.edu/oepweb/

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 Management - For safety issues that may generate lawsuits against the University.

642-5141

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

Physical Plant - Campus 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)

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